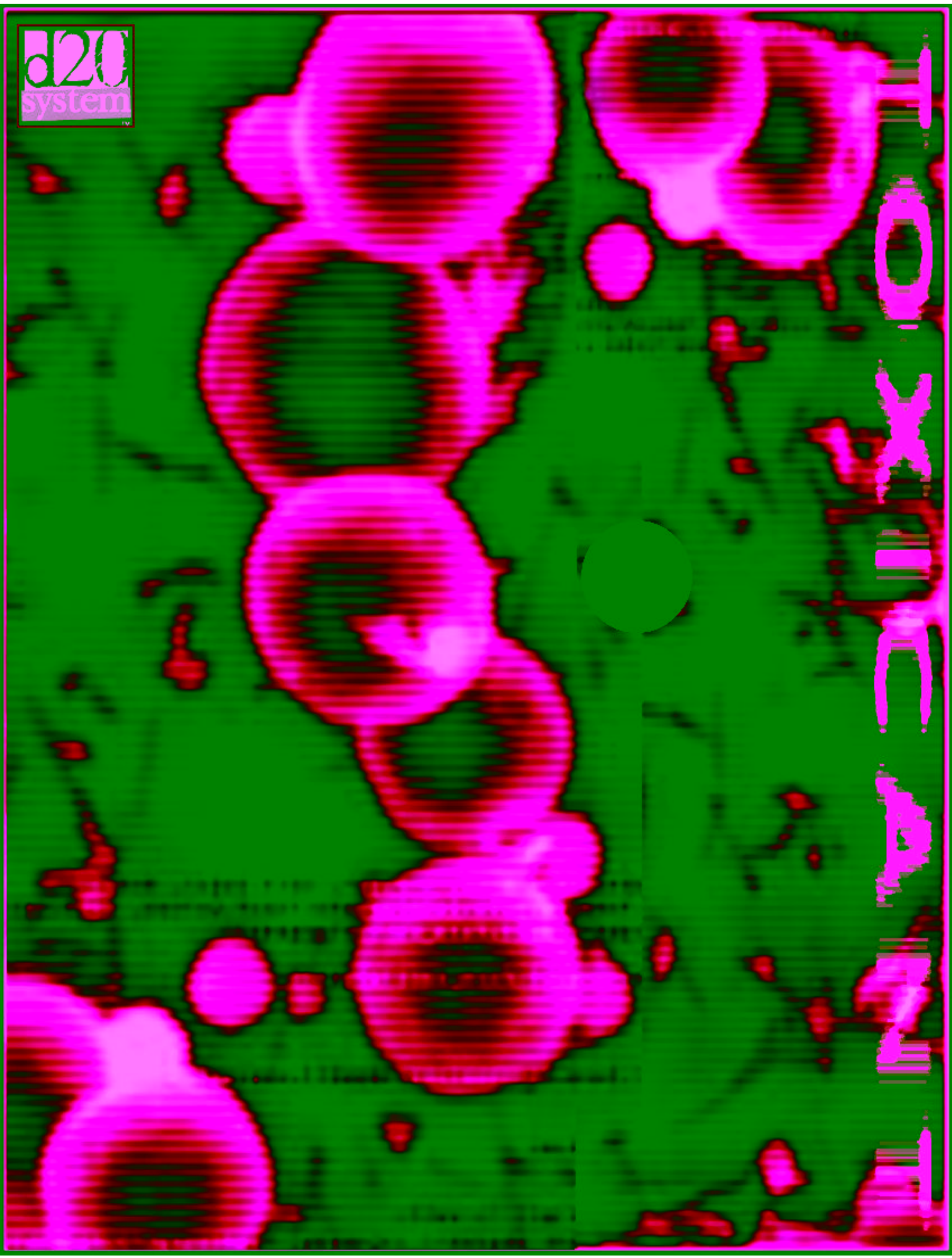




0
X
A
Z



INTRODUCTION

THE HISTORY OF POISON
POISON IN THE MIDDLE AGES
POISON AND THE VICTORIAN AGE
POISON AND MODERN MAN

PAGES 3-4

CHAPTER 1 POISON RULES

REALISTIC POISONS
POISON CLASSIFICATION
DOSAGE
ONSET & DURATION
SYMPTOMS & DAMAGE
POISON DC
CRAFTING POISONS

PAGES 5-13

CHAPTER 2 ARACHNID VENOMS

SCORPIONS
SCORPION MYTH AND LORE
UNDERSTANDING SCORPIONS
SPIDERS
SPIDERS MYTH AND LORE
UNDERSTANDING SPIDERS

PAGES 14-25

CHAPTER 3 TOXIC CHEMICALS

CLEANERS, SOLVENTS, FUELS AND
PESTICIDES

PAGES 26-32

CHAPTER 4 FUNGAL POISONS

POISONOUS MUSHROOMS
FUNGUS POISONS
FOLKTALES

PAGES 33-39

CHAPTER 5 MARINE VENOMS

POISONOUS FISH, VENOMOUS JELLIES,
DEADLY CRUSTATIONS

PAGES 40-47

CHAPTER 6 TOXIC PLANTS

DANGEROUS PLANTS
PLANT POISONS

PAGES 48-66

CHAPTER 7 SNAKE VENOMS

SNAKES
MYTH AND LORE
UNDERSTANDING SNAKES

PAGES 67-75

**COPYRIGHT©2003
MAD KAISER GAMES
All Rights Reserved**
DISCLAIMER: The material provided in this book is designed for game purposes only. Information regarding poisons and medical treatments is intended as a supplement to role-playing games and is not a substitute for the expertise of physicians or other health-care professionals.
The author of this guide does not condone or encourage the use of poison. In no way will the author of this guide or any contributors of this guide be held responsible for the actions of other people.

The Contents of this Book are
Deemed Open-Game Content

INTRODUCTION

THE HISTORY OF POISON

Since the dawn of time, mankind has sought to find weapons, weapons made more and more efficient against animals or their enemies. Even though a sharp stone could inflict injury, there had to be more destructive means available. In this search, more potent weapons were indeed found and incorporated into their existing weapons. These findings gave early men much power over others, and became a dark secret, a mystery held only by the most observant and intuitive members of the tribe.

The use of poisons dates back as far as spiritual and mythological beliefs have been recorded. The first accounts deciphered are from the Sumerians of Mesopotamia, now known as Iraq. There are associations of poisons with Gula, Goddess of Medicine dating back to as early as 4500BC and accounts of her have been found as late as 1400BC.

Records of Egyptian knowledge of poison can be dated about 300BC. Menes, the earliest recorded Egyptian king studied the properties of poisonous plants. Detailed accounts at this time were not recorded as it was forbidden to reveal any secrets taught in the temples and so valuable was this knowledge to the priests that exposing these mysteries to outsiders carried the penalty of death. Still, there is sufficient evidence that the Egyptians were familiar with antimony, copper, crude arsenic, lead, mandrake and opium as well as the natural plant, reptile and insect poisons. Egyptians also were the first to master distillation and the extraction of poison from peach pits.

The Ancient Greeks knew of arsenic in the form of realger and orpiment. They had an idea of metals such as lead, copper, mercury, silver, and gold and some extent of their properties. Concerning vegetable poisons, the Greeks chiefly employed Hemlock. Under certain conditions, suicide was seen to be noble, and the use of the 'poisoned cup' was often sanctioned. This was a dose of Hemlock mixed into honey and wine. The poisoned cup was also used as a form of capital punishment. The administered dose, however, was often not fatal. During these ancient times, poisons were essentially viewed as mysterious substances, and were poorly understood. It would seem that the ritual and preparation of poisons was deemed the most important step in the act of poisoning, as opposed to the fundamental action of the poisons themselves, so a second dose was frequently required.

Even in Greek mythology there is reference to poison. The Greeks attributed the discovery of poisonous plants to Hecate, the goddess of sorcery. An example of poison being used for murder is the story of Medea, daughter of the Sun-God Apollo. She became the wife of Ageus, King of Athens. Ageus' son, Theseus, returned to Athens to claim his rights and Medea resented this and vainly attempted to poison Theseus with a poisoned goblet. That same year, Ageus was poisoned by a court eunuch named Bagoas who had his own political ambitions. Arses was the oldest son of Ageus. Bagoas placed him on the throne after the murder of his father, expecting to use him as a puppet ruler. Evidently, Arses had too much of a mind of his own and so, after a short reign of only two years, Bagoas also had him poisoned.

The Eastern races had much more interest and knowledge of poisons than other societies. The Persians were the most interested in the art of poisoning, especially among the nobles. Plutarch and Ctesias relate an account, which occurred during the reign of Artaxerxes II from 405 to 359BC. Queen Parysatis supposedly poisoned her daughter-in-law, Statira by means of a poisoned knife. Certain venom was administered to one side of a knife and used to cut a bird at the dinner table. Taking the untainted half, Parysatis lived while her daughter-in-law died.

A custom adopted by the Chinese in 246BC still exists today. Known as the Chou Ritual, it was developed several centuries before the time of Confucius. In the first, wands with whole feathers were waved, in the worship of the spirits of agriculture. In the second wands with divided feathers were used in the ancestral temples. In the third feather caps were worn on the head, and the upper garments were adorned with kingfisher feathers in blessing the four quarters of the realm. In the fourth yak-tails were used in ceremonial for the promotion of harmony. In the fifth shields were manipulated to celebrate military

merit. In the sixth the bare hands were waved in homage to the stars and constellations. Of the 5 poisons used, 4 are known; cinnabar (mercury), realger (arsenic), green vitriol (copper) and loadstone. Burnt together, the fumes were gathered on the feathers and then consumed.

Poisoning people at the dinner table had become a common activity, especially amongst the ancient Romans. Homicidal poisonings in the high circles of Roman society were happening as early as 331BC. Nero was infamous for eliminating family members, and with the aid of his personal poisoner, Locusta, poisoned his brother Britannicus with cyanide. Belladonna was also a favorite poison, and Locusta, used this on the instruction of Agrippa, the wife of Claudius, to kill him.

Soon after the properties of poisonous substances were found, people looked towards methods of prevention of their fatal effects. Mithridates was King of Pontus, now called Turkey, around the time of 130BC. He was thought to have lived in constant fear of being poisoned by his enemies, so he studied the subject of antidotes extensively. He tested various poisons on condemned criminals and experimented with other poisons to see if they held any antidotal properties. He took small doses of various poisons daily in an attempt to render himself immune, with a measure of success.

With the advent of modern chemistry and toxicology, we have begun to understand the chemistry behind the actions of poison. However, despite a lack of scientific method, a remarkable amount was known about the effects, uses and treatments of poisoning in the unscientific world of medieval Europe.

POISON IN THE MIDDLE AGES

Science in the Middle Ages was absolutely dependent on the translations of Greek texts, particularly those of Aristotle. Most initially came via the Islamic culture, particularly through Spain. Islamic scientists had heavily commented on and added to this heritage, so Europe gained a highly developed scientific literature of a thousand years of intellectual exploration. The greatest of these translations were of Aristotle's works. Most think of him as one of the great early philosophers. In fact he was a great Greek scientist and most of his works pertain to science, and especially to Natural Philosophy. The works of other authors, such as Ptolemy, Hippocrates, Galen, al-Kwarizmi, Avicenna, Rhazes, and Archimedes were also largely concerned with science. As was Plato's Timaeus. The first medieval scientists to translate these ancient texts and had dedicated to the study of poisons were the Apothecaries. They produced and often sold preparations for a multitude of uses, and it was well known that many of these could be put to less beneficial purposes than those for which they were intended. The medieval study of poisons was also greatly influenced by Persian and, above all, by Indian ideas. The Muslims were interested in the identifications of poisonous substances and the distinction between poisons derived from animal products and the poisons derived from mineral and vegetable substances, as is seen in Ibn Wahshiyaalso's Al-Filahah Al-Nabatiyah or Book on Poisons. However, when it came to the actual preparation of poisons and treatment of cases of poisoning, the Muslims used and improved upon Greek methods, which alone struck them as being rational and useful.

Poisoning was also a popular subject of the new academic texts, often written by monks. Monasteries were often the main seats of learning in a largely illiterate population, and were frequently called upon to help relieve the suffering of the sick and elderly. Poison was usually classed with medicaments in the Middle Ages, and was classified as the fourth degree of medicine, wherein the destruction or death of tissue is produced. This made the chemical knowledge of plants and animals essential and worth the arduous task of cataloging them. One example of these catalogs is 'The Book of Venoms', which was written by Magister Santes de Ardoynis in 1424. This was a reasonably comprehensive account of the poisonous plants and animals known at the time, their effects and the best ways that they could be treated or used as medicine.

Many of the poisons used more recently. Arsenic, cyanide, strychnine, opium, atropine, aconite and heavy metals, were also described in

INTRODUCTION

these tomes. They were often referred to by several different names, or as the plant from which they have more recently been purified, but were usually described with great accuracy and with little variation from modern texts. It is unlikely that these academic documents would have been comprehensible or even available to the general public. However, there was a great deal of common knowledge poison-lore available to the masses. Some was very accurate, while some outrageously backwards.

The act of the poisoners that worked unseen, and their association with witchcraft resulted in a level of paranoia amongst the general population. This may in fact have been justified! With poisons readily available and no real forensics or toxicology to provide convicting evidence, poisoning seems to have been relatively widespread. Poison thus gained the stigma of being a coward's weapon. Using these venoms took a degree of wickedness, being calculated in cold blood. Poisoning was a wicked business, whether the victim lived or died, and the fear of the nasty death a poison brought was a daily fact of life for many people. Often the antidote was almost worse than the contamination, and could just as easily cause additional slow suffering before death anyway.

Medieval methods of defense against poisons gained in demand, and while some antidotes, treatments and methods of avoiding poisons were very reliable, if not overly ritualistic, there were also a great many creative, and entirely inaccurate rituals. Drinking vessels made from a unicorn's horn, rhino horn, or various gemstones were alleged to neutralize any poison contained in them. These materials, already valuable, became even more sought after, and could raise a huge price.

Clever rogues took advantage of this, and persuaded wealthy customers that poisoners were everywhere, and that the only way they could save themselves was to buy the gemstone, chalice or whatever other charm was being offered. These very rogues could be responsible for the sudden epidemic of poisoning themselves! More easily obtainable anti-poison charms were also used, such as toadstones. Toadstones were the calcified stones from the stomachs of toads. Some religious artifacts, such as amulets and talismans, were also thought to be protective against poisoning. These were largely introduced by Jews, a race with a mixed reputation with respect to poisoning. Most generally the rabbi would make amulets of paper, parchment, silver, gold or copper. The Jewish strictures forbid graven images, so the amulets were not iconic but rather textual. Any decorative elements were limited to patterns formed from the words themselves. The texts used vary widely. They often included is the word Shaddai, the names of various angels, or ritualistic formulae and acronyms. Talismans were very similar to amulets, but were on the borderline of what a faithful Jew could use, since the talisman bore graven images similar to an idol. These were more often sold to the people of other races and religions. Despite this association with protective charms, the scheming Jewish poisoner was a common figure of fear and hate.

POISON AND THE VICTORIAN AGE

The late 19th century, also known as the Victorian Age, was hotbed of poisoning. It was during the 19th century that the things we recognize as the sciences were formed and acquired their great cultural authority. The sciences developed in contexts shaped by the French Revolution, the Industrial Revolution, and the sweeping social and cultural changes of the century. Poison related sciences saw a revolution of their own in this turbulent time. While the reported cases of poisoning remained constant throughout the century, there were a number of high-profile murder cases involving poisoning that gave the impression of an epidemic. The purchase of such poisons as strychnine and arsenic had become a convenience, and poisoning had become a very popular topic with the press. Poisoning had most notably become a fashionable crime amongst the wealthy, compounded by the new popularity of the life insurance policy. Anyone with life insurance suddenly found they had a price on their head, ready to be collected by any scheming relative that could claim this reward if they simply managed to get away with murder. Poisoning was still the easiest form of murder to achieve this

unscrupulous goal. It could be done in secrecy and its proof relied purely on circumstantial evidence. As a result of the public's fear of poisoning, laws were hastily passed. Most notably, doctors were charged with the civil registration of death so that a body could be officially examined before it was disposed of.

Poisoning was also a popular method of murder for the women of this era as well, and the poison most often used was arsenic. Many used arsenic as a rat poison and it was also used in women's cosmetics to improve complexion. Therefore few asked questions when a woman went into the chemist's shop and purchased some arsenic. They simply had to sign a book, called the Poison Book, stating what they had bought. These books were kept in every hardware store and chemist's shop. Forging one's name was a simple matter when traveling and a quite common thing for these Victorian murderers.

In an attempt to get more poisoning convictions, the Victorian authorities turned to the greatly developing sciences, specifically toxicology and forensic medicine. Many of the tests used by these early toxicologists were unfortunately quite unreliable and therefore toxicology findings were often greatly disputed. As the field of forensics progressed throughout the 1900's, so did the science poison detection and the science of toxicology became more reliable and important.

As the twentieth century progressed, so too did technology and science. Improvements in knowledge demanded that the use of poison as a weapon must evolve in order to remain covert and evade detection. Before, most cases of homicide by poison had been undertaken by those who had dealings with alchemy. During the 20th century, the source, preparation and administration of poisons was stripped down. Each process became cleaner, more intellectually mastered. The general populace was no longer a mob of ignorant peasants, but educated in the basics of reading, math and science. The rather complicated and technical business of poisoning was no longer shrouded in mystery, but was now available in print to those who actively sought it.

POISON AND MODERN MAN

Poisoning in the 20th century became overwhelming. Mankind was discovering new things. Industry, agriculture, petrochemistry, chemical warfare and pharmacology are but a few areas where hugely toxic agents were being put to use, often without the knowledge of their possible effects on life. Socially, people were discovering new ways in which to poison and abuse their own bodies for pleasure. The consequences of chronic alcohol abuse are well documented, and most people are aware of the effects that it can have on certain organs, for example steatosis, necrosis and cirrhosis of the liver. Education has also improved our understanding of the toxic potential of drugs, both prescription and non-prescription. During the last century, accidental and intentional suicide frequently found pharmaceutical drugs to be responsible. In response to the spread of cases of poisoning due to social and industrial causes, the field of toxicology grew.

In cases of homicide, the poisons of old were still at large. Arsenic remained a favorite, and was especially so in the early part of the century. Cyanide was also too popular around the middle of the century. The poison found a niche during the second world war, and was used in liquid form as a suicidal tool for agents of the Resistance. Cyanide enjoyed a resurgence of popularity in the latter half of the century, with most of the poison secreted in food, drink and pharmaceutical products. Although many of these classic poisons were in style, including strychnine, chloroform and abrin, a new trend was beginning to emerge. Murderers were using previously undiscovered or scarcely used poisons. The ways in which poisons were administered was also changing. Toxicology became ever more important as the effects of the newer poisons were not well documented, and symptoms were often mistaken for mysterious viral or endogenous illnesses. In many cases, 20th century poisoners felt that they were committing the perfect crime as many of their poisons were difficult to trace and diagnose. However, the massive advances in forensic toxicology made most cases of poisoning fallible, and it has only been via such advances that many murderers have been caught.

CHAPTER 1 - POISON RULES

REALISTIC POISONS

In the real-world, when a person becomes the victim of poison, the effects and symptoms continue for hours, some will even persist for days before killing or subsiding. The rules provided in the Player's Handbook don't really reflect this, mainly because it's just more convenient for GMs to get the poison damage over and done with and not fiddle with bookkeeping. I feel that a GM should do what it takes to make his own life easy, but poison is a corner not to be cut. Role-playing continuing and agonizing symptoms makes the effects of poison more realistic, and is an essential (and often neglected) story-telling tool. If dramatic and imperiled gaming is your goal, it's worth it.

The current D20 system of administering poisons is a bit too simplified to be realistic. Make your saving throw and nothing happens, fail the saving throw and you're suffering. Real-world poisons rarely take effect quickly and usually are accompanied by debilitating symptoms. With save or nothing poisons, high level characters will scoff at the most dangerous poisons. Even when the poison causes major damage if the saving throw is made, most high level characters have the hit points and the bonuses to shrug the effects off, or may even become "immune" to poison just by having unrelated skills and feats that boost fortitude.

Here you'll find a summary of a more scalable system, its highlights and characteristics. With this new system you will be able to introduce threatening real-world poisons and their true effects into any new or on-going campaign.

POISON CLASSIFICATION

There are several different forms of poison to be found or crafted, and each has particular advantages. The following is a list of each type of possible classification.

Ingested Poison: Ingested Poisons are poisons that are dangerous if consumed. The most common Ingested Poisons are crafted from plants or from common chemicals. Frequently, poisoning occurs accidentally when a creature unknowingly consumes a poisonous plant, or a food that has been unintentionally contaminated.

Some poisons carry a foul taste or odor. While strong food or drink can sometimes disguise these telltale signs, there is still a chance a creature will detect the poison before it can be consumed. The creature may make an Intelligence check using the DC of the poison in question, which may be modified by the GM depending on strength of spice, experience with particular poisons in the past, or inexperience with particular foods ("I've never had Red Eel Soup before"). This check should be performed secretly by the GM.

Dermal Poison: Dermal poisons, also known as Contact Poisons, are oils or resins that are rapidly absorbed by the skin. These poisons are usually spread directly, or mixed with other substances and spread on objects that are commonly grasped by the hand, such as door knobs, envelopes or weapon handles. This poison also works as an Ingested Poison and a Subdermal Poison. It is incredibly difficult to detect this type of poison, unless precaution is taken to always wear protective gloves or always examine a surface before touching. The creature may make an Intelligence check with a -8 penalty, using the DC of the poison in question. This may be modified by the GM and

should be performed secretly.

Parenteral Poison: Parenteral poisons are poisons that must be introduced into the bloodstream to cause damage. These poisons are usually animal venoms injected with piercing bites, stings, or hollow needles. They may also be spread on slicing or stabbing weapons. Contrary to popular belief, these poisons cannot be "sucked out". Consult the Dungeon Master's Guide and Player's Handbook for rules on handling poisoned weapons.

Vaporised Poison: This is a cloud of poison, created by vaporising or spraying another type of poison. The poison may be deadly if inhaled or be a contact poison that is absorbed by the skin. In order for a poison to qualify as a respiratory agent, it must first be a liquid or a fine dust. The methods that are used to vaporise or spray a poison are many and varied. Aerosol cans, pressurized garden sprayers, candles, incense, heating elements, bellows, perfume atomizers, electric humidifiers and nebulizers are all typical examples of delivery systems. A minimum of .5oz/17g of poison is required for a direct attack, such as spraying in the face or eyes. For an area attack, such as a deadly cloud, 3oz/85g is required to make a cloud that fills a 5 cubic foot area. Every round a creature is exposed to a poisonous cloud, they must Save or become poisoned. A cloud of poison will linger in a still area for 10 minutes. A moderate wind (11+ mph) disperses a cloud in D4 Rounds. A strong wind (21+ mph) disperses a cloud in 1 Round.

DOSAGE

For every poisonous substance, there is a minimum specific amount required to be effective. Each poison in this book has its dosage listed in standard and metric amounts, based on its effect the average 20th Century human male. The main factor effecting a standard dose is size.

CREATURE SIZES

A creature's or character's size determines exactly how much poison is needed to cause an effect. The same amount of Barium Carbonate required to kill one man could kill a few pigs or dozens of mice, but wouldn't even slow an elephant. The table provides the conversion of the average dosage provided for the various sizes of different creatures.

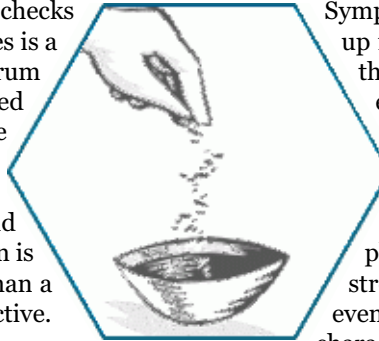
Creature Size	Creature Example	Percent Of Average Dose
Fine	Beetle	.1%
Diminutive	Mouse	1%
Tiny	Chicken	5%
Small	Child	25%
Medium	Adult	100%
Large	Horse	900%
Huge	Rhino	1,800%
Gargantuan	Killer Whale	15,600%
Colossal	Antarctic Blue Whale	110,000%

EXAMPLE: The minimum amount of Yellow Desert Scorpion (*Androctonus Australis*) venom required to effect an adult human is .011oz(320mg). To determine how much of the venom is required to effect a rat, a diminutive creature, we consult the chart to find the percent of the average dose. The dose required to harm a diminutive creature is 1% of the average, or .00011oz(3.2mg).

CHAPTER 1 - POISON RULES

MULTIPLE DOSES

It is possible to administer more than one dose to an individual, either by adding more doses to food and drink, multiple injections or bites & stings, multiple flesh contacts, or breathing inside particularly thick toxic clouds. Each additional dose always adds +1DC to the poison's base DC, adds +1 to the Duration and subtracts -1 from the Onset. Even high level characters should be concerned when a DC12 poison becomes a DC35 or DC45 poison! Additional doses may also have an effect on certain Symptoms or Damage induced by a poison. Multiple dosing also increases the chance that the poison will be detected, granting +1 to any Detect Poison checks per dose. The only restriction to multiple doses is a matter of volume; You can't put 10 gallons of rum in a 5-gallon keg! The amount of poison added to food or drink can never exceed 25% of the item's total volume. If there is more than this, animals will simply turn up their noses and people will be immediately cautious and refuse to eat. Therefore, a highly potent poison is a more likely candidate for multiple dosing than a poison that requires large amounts to be effective.



a hinderance in their own right. Symptoms can arise together, or far apart, at anytime during the Duration of the poison. Generally, these Symptoms will persist until the malady has been cured or allowed to run it's course. The GM may assign a time line for the poison and it's Symptoms, roll randomly for them, assign triggers to particular Symptoms, or can simply apply them as needed or desired.

Timeline Symptoms: A precise way for a GM to apply Symptoms is to set a timeline for them. For example, a particular poison has a Duration of three hours and has five Symptoms. The GM decides to divide the symptoms up in the first two hours, and assigns damage in the third. So for the next two hours, the character will experience a new Symptom every 24 minutes.

Triggered Symptoms: With this method the GM can associate symptoms with any number of events. Linking the onset of symptoms with physical trauma, failed rolls, stressful situations, or strenuous activity are good examples. A player may even learn to avoid certain activities if he knows his character will suffer if he does not.

COMBINING POISONS

Mixed poisons are counted as multiple doses, always using the highest DC, adding +1 for the second poison and each additional dose for Fortitude and Crafting Checks. If there are symptoms common to each individual poison, the GM may decide to increase the severity, or simply apply the symptom as normal. In some cases, the chemistry of two or more poisons is incompatible, and will actually render both poisons harmless. If a Critical Failure is rolled when making a Craft Skill check, the poisons have become inert and harmless. The GM should make a note that those poisons are not compatible and can never be mixed successfully.

ONSET & DURATION

While some real-world poison can work immediately, most do not. Some can take a few seconds, while others can take hours, days or even weeks. Each poison has a differing Onset time, the earliest point in time at which the poisoning process takes place. An approximate Onset time has been provided for each poison, and the GM should determine and apply this time secretly. It greatly adds to a player's anxiety when kept in the dark about possible contaminations. What was that oily fluid on the needle trap? What does it smell like? Do I feel anything? When nothing happens in the span of a turn or so, a player may brush it off and celebrate his good fortune, only to suffer the first symptoms a few hours later in confusion.

How long these symptoms persist is determined by the Duration. Like Onset, Duration times can vary greatly. Duration not only determines how long symptoms persist, but also the persistence of some Damage effects. Duration should also be determined secretly by the GM when determining Onset time.

SYMPTOMS

Symptoms are a characteristic indication of the existence of disease or poisoning, especially when experienced by a character as a change from normal, but more than that, they can be

Applied Symptoms: This is by far the easiest method. The GM simply applies the symptoms when he feels like it, all at once or whenever. This is a convenient way for a GM to advance a story line, keep a player from overstepping boundaries, or use as an in-game punishment for inappropriate behavior.

LIST OF SYMPTOMS

The following is a list of typical Symptoms, their descriptions, and their effect on game play and combat. If more than one Symptom affects a character, apply them all. In all cases, apply the most severe effect first. If at any time a GM feels that a Symptom is not severe enough, he may increase the penalties.

Agitation: Those who exhibit signs of Agitation will be very angry, fidgety, nervously jumping at noises and unable to focus. -3 penalty on all skill checks, -2 Effective Charisma.

Albinism: The skin of the creature is deathly pale and the eyes are a pinkish hue. Creature suffers double damage from all Sun/Light effects or attacks (all checks concerning Heat Dangers caused by direct sunlight suffer a -1 as well).

Anxiety: This symptom is noted as feelings of fear and apprehension, even in calm and safe situations. -2 Morale penalty on attack rolls, weapon damage rolls and saving throws, -1 Effective Charisma.

Blindness: Vision has been totally or partially be eliminated. The creature may see blackness, brightness, moving shadows, swirling colors or any combination of these. This works as the spell Blindness and Dungeon Master's Guide regarding Blindness for game purposes.

Blister: A blister is local swelling of the skin that contains watery fluid. While basically harmless themselves, a multitude

CHAPTER 1 - POISON RULES

of oddly colored blisters are rather unsightly. -1 Effective Charisma, +1 bonus to all Healing/Medical Skills.

Blurred Vision: It becomes difficult to focus on close and distant objects, giving the creature a blurry perspective. A creature with blurred vision, in addition to obvious effects, suffers a 20% miss chance in combat (half concealment), loses any Effective Dexterity bonus for AC, moves at 25% speed, suffers a -1 penalty on Strength and Dexterity Skills and attackers are granted a +1 bonus to Attack Rolls. Consult the Dungeon Master's Guide regarding Blindness.

Body Aches: A Body Ache is a dull, steady pain that generally effects muscles and joints. This pain discourages movement, as the pain increases as the body becomes active. -1 Effective Dexterity, -2 penalty on Strength and Dexterity Skills.

Chills: This symptom is a sensation of coldness, even in hot climates, accompanied by shivering. This is often a very good indication of certain illnesses or toxication. +2 bonus to all Healing/Medical Skills. -1 penalty on Dexterity Skills.

Confusion: Those that become confused behave randomly, may speak of or ask about unrelated things, and have difficulty staying focused on any one task. This works as the spell Confusion and Dungeon Master's Guide regarding Confusion for game purposes.

Convulsions/Seizures: This symptom is an uncontrolled fit of involuntary muscular contraction that will randomly start and stop with little provocation. GM rolls a D6 secretly to determine the amount of Convulsions/Seizures the creature will suffer within the span of the poison's Duration, and can apply them at GM's Discretion. A creature suffering from Convulsions/Seizures is treated as Incapacitated and Helpless for game purposes.

Cough: A cough is a sudden and noisy expulsion of air from the lungs to keep the respiratory passages free of irritating material. -5 penalty on any attempts to perform Skills or Feats that require stealth, silence or a clear voice, such as Move Silently or Intimidate. Verbal spell casting is not possible.

Cramps: Cramps are a sudden, involuntary, muscular contraction that cause sharp pain, often occurring in the leg or shoulder. GM rolls a D10 secretly to determine the amount of Cramps the creature will suffer within the span of the poison's Duration, and can apply them at GM's Discretion. A cramp lasts 1D4 Rounds and a creature suffering from Cramps is considered Checked for gaming purposes.

Deafness: Those with Deafness have mostly, or completely, lost their sense of hearing. There may be a dull ringing, deep muffled bumping, high or low humming, or any combination of these. This works as the spell Deafness and Dungeon Master's Guide regarding Deafness for game purposes.

Diarrhea: To put it bluntly, Diarrhea is excessive and frequent evacuation of watery crap. This can be horribly inconvenient to a person, to say the least. GM rolls a D4 secretly to

determine the amount of "squirt-attacks" the creature will suffer within the span of the poison's Duration, and can apply them at GM's Discretion. A creature suffering from an attack has 2D6 Rounds to get his arse out of his trousers. A creature may simply ignore the attack of course, possibly at the expense of a pair of pants or good boots.

Discoloration: This is an odd change in the color of the skin or other tissues. Does little to effect game play, but is a good indication of certain illnesses or toxication. +2 bonus to all Healing/Medical Skills.

Difficulty Speaking: The creature has lost all or most of the ability to speak. Conversation and verbal spell casting are impossible, as are any Skills or Feats that require a clear voice.

Dizziness: Creatures suffering from this symptom have a whirling or spinning sensation in their mind and have a tendency to fall down. Dizziness lasts for the Duration of toxication and is treated as a Staggered condition for game purposes. Additionally, the creature must make a Reflex Saving Throw at -3 when attempting any task more difficult than walking or become Prone.

Drooling: Drooling creatures have an excess of saliva running from the mouth. -2 penalty on any attempts to perform Skills or Feats that require a clear voice, -1 Effective Charisma, Verbal spell casting is not possible.

Drowsiness: A Drowsy creature has become dull and sluggish with sleepiness. -1 Effective Strength, -1 Effective Dexterity, Any prolonged or difficult activity will cause the creature to become Fatigued.

Euphoria: This symptom grants a feeling of great happiness or well-being to the affected creature, rarely making attacks, even when presented with very dangerous or hostile situations. A creature experiencing Euphoria is treated as Confused for game purposes, except that if attacked they will simply wander away in confusion, unless prevented.

Fainting: Fainting is an abrupt and brief loss of consciousness. GM rolls a D4 secretly to determine the amount of Fainting spells the creature will suffer within the span of the poison's Duration, and can apply them at GM's Discretion. Each Fainting spell lasts 2D4+1 Rounds. For game purposes, the creature is Staggered the first Round, becoming Unconscious and falling, then rousing and becoming Prone the final Round.

Fatigue: A Fatigued creature is physically weary. This works as the Dungeon Master's Guide regarding Fatigue for game purposes.

Fever: The creature has abnormally high body temperature, even in freezing weather. Does little to effect game play, but is a good indication of certain illnesses or toxication. +2 bonus to all Healing/Medical Skills.

Flatulence: To put it bluntly, Flatulence is frequent and

CHAPTER 1 - POISON RULES

noisy expulsion of foul smelling intestinal gas through the anus. While this can be entertaining, ignored, or even respectable in limited company, it is generally a hinderance in most situations. -8 penalty on any attempts to perform Skills or Feats that require stealth or silence during the duration, -2 Effective Charisma(Optional).

Frothing: A creature with this symptom has a foam of saliva churning from the mouth. Treat as Drooling for game purposes.

Hair Loss: The creature has begun visibly losing random clumps of hair, fur, feathers, scales, etc. -3 Effective Charisma.

Hallucinations: A creature suffering from constant Hallucinations has the false perception of visual, auditory, tactile, olfactory, or gustatory experiences that are seemingly real. Those experiencing Hallucinations can be treated as suffering from Confusion, or can instead experience one of the following Hallucinations:

Roll D6

- 1 Colors & Lights
- 2 Glowing Auras
- 3 Frightening Visions
- 4 Self-Delusions
- 5 Whispering Voices
- 6 Roll Twice

Colors & Lights: The creature sees a twisting pattern of rainbow colored clouds and sparkles in the air. This pattern causes the creature to become fascinated and he/she gazes at the display as if hypnotized. Treat as the Rainbow Pattern spell for game purposes.

Glowing Auras: The creature sees bright auras of color around other creatures and objects. Treat as Dazzled for game purposes.

Frightening Visions: The creature sees fearful images everywhere. They may see monsters, hordes of insects, ghosts, or the things they most fear. Treat as Frightened for game purposes.

Self-Delusions: The creature believes that he is something else entirely. The creature may believe that he is a plant or another inanimate object, a monster, or another character or class and the Hallucinations will change to support the delusion.

Whispering Voices: The creature hears paranoid voices that warn him of false enemies and tell him do things. Treat as Shaken for game purposes.

Headache: The creature is suffering a localized pain in the head. -5 penalty on any attempts to perform Skills or Feats that require mental concentration.

Incoordination: Uncoordinated creatures lack normal control of muscular movement. -5 penalty on any attempts to Attack, Defend, or perform Skills or Feats that require coordination, -2 Effective Dexterity. Critical Failures require the creature to make a Reflex Save or suffer an immediate attack of opportunity from all opponents currently engaged.

Inflammation: Inflammation is characterized by light pain, redness, and minor swelling. Does little to effect game play, but is a good indication of certain illnesses or toxication. +2 bonus to all Healing/Medical Skills.

Intoxication: This symptom resembles drunkenness, as if the creature were delirious with strong drink. -5 penalty on any attempts to perform Skills or Feats, -2 Wisdom & Intelligence, Treat as Staggered for game purposes. Critical Failures require the creature to make a Fortitude Save or be treated as Stunned for the next D4 Rounds.

Irritation: This is sensation of soreness or tenderness of the skin or other tissues. Does little to effect game play, but is a good indication of certain illnesses or toxication. +2 bonus to all Healing/Medical Skills.

Itchiness: The creature has a constant itching sensation, making him restless, not able to relax or be still. -1 penalty on any attempts to perform Skills or Feats that require mental concentration.

Jaundice: Jaundice is a yellowish discoloration of the whites of the eyes and skin caused by deposits of bile salts. Does little to effect game play, but is a good indication of certain illnesses or toxication. +2 bonus to all Healing/Medical Skills.

Labored Breathing: The creature is having difficulty breathing, loudly sucking at air with quick, forced breaths. -5 penalty on any attempts to perform Skills or Feats that require stealth, silence or a clear voice, such as Hide or Listen. Verbal spell casting is not possible. Treat as Staggered for game purposes.

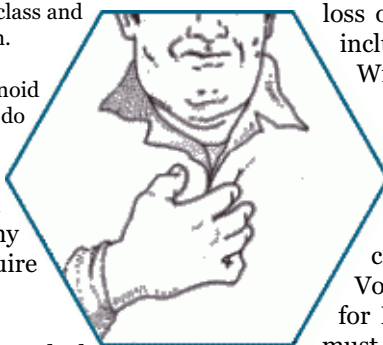
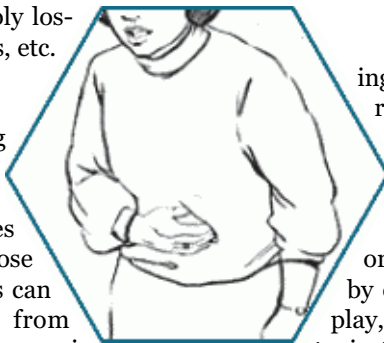
Localized Pain: Localized Pain is a sharp and steady pain limited to a specific body part. Any creature suffering localized pain must make a successful Fortitude Save or be treated as Entangled for game purposes until the pain subsides.

Memory Loss: The creature suffers from partial or total loss of memory. In order to perform a mental task, including spell casting and psionics, a successful Will Save must be made until memory returns.

Nausea/Vomiting: The creature suffers from a feeling of sickness in the stomach and has an urge to vomit. Treat as Nauseated for game purposes. Critical Failures require the creature to make a Fortitude Save or immediately Vomit. A Vomiting creature is treated as Stunned for D4 Rounds, plus all other Nauseated creatures must make a Fortitude Save +3 or immediately Vomit themselves.

Nosebleed: A cut has opened in the creatures nose and has begun to bleed. While rarely dangerous, bleeding from the nose can be unsettling. Treat creatures with a Nosebleed as Shaken for game purposes. A Nosebleed is a good indication of certain illnesses or toxication. +1 bonus to all Healing/Medical Skills.

Numbness: Numbness is the inability to feel physical sensations. A numbed creature has a -1 penalty on all Reflex



CHAPTER 1 - POISON RULES

Saves.

Pain: Pain is a manifestation of physical suffering, usually caused by injury or illness. -2 penalty on any attempts to perform Skills or Feats that require mental concentration.

Rapid Pulse: The creature has an abnormally fast heartbeat that can easily be felt by others through contact. Does little to effect game play, but is a good indication of certain illnesses or toxication. +1 bonus to all Healing/Medical Skills.

Rash: The creature is suffering from a large ugly, patchy inflammation on the skin. Rashes are very uncomfortable and most are unsightly. GM may place the rash at Discretion, or roll on a random body part table. -1 Effective Charisma (if the rash can be seen)

Red Skin: *SEE: Discoloration*

Sore Throat: The throat of the creature has become raw and inflamed, characterized by pain in swallowing. Treat as Cough for game purposes.

Sweating: A creature is sweating a great deal more than average, even in freezing weather. Does little to effect game play, but is a good indication of certain illnesses or toxication. +1 bonus to all Healing/Medical Skills.

Swelling: The flesh in a particular area has formed a large, hard, painful lump. Does little to effect game play, but is a good indication of certain illnesses or toxication. +2 bonus to all Healing/Medical Skills.

Thirst: The creature has an abnormally great desire to drink. The creature must consume at least 8oz of water each hour, or sustain D4 points of subdual damage.

Vertigo: The creature's natural sense of balance has been totally negated. The creature suffers a -8 penalty to Attack, Defense, Skill and Feat Rolls, and a -4 Effective Dexterity. Movement is at half speed. Once each Round, the creature should make a Reflex Check to avoid falling down or become Prone.

Watery Eyes: The creature's eyes have begun producing an overabundance of tears. Treat as Blurred Vision for game purposes.

Weakness: Weak creatures have become feeble, being without much physical strength or vigor. Treat as Exhausted for game purposes.

Wheezing: The creature can only breathe with difficulty, making a hoarse, loud rasping, or whistling sound with each breath. -8 penalty on any attempts to perform Skills or Feats that require stealth, silence or a clear voice, such as Hide or Listen. Verbal spell casting is not possible. Treat as Staggered for game purposes.

DAMAGE

Some poisons do more than cause a few points of damage before fading away. Some poisons can cause lingering or permanent damage that can plague a creature for a lifetime. Damage could heal over time, or if more serious, may require highly skilled and expensive medical care to heal. Just like symptoms, the GM may assign a time line for the poison Damage, roll randomly for it, assign triggers to particular Damage, or can simply apply them as needed or desired. It takes just one deadly poison attack to rob a character of mobility, strength, or even memories, making poison a more terrifying prospect.

DAMAGING EFFECTS

The following is a list of typical special Damage, descriptions, and effect on game play and combat. If more than one Damage affects a character, apply them all. In all cases, apply the most severe effect first. If at any time a GM feels that the Damage is not severe enough, he may increase the penalties.

Anti-Coagulation: A victim of Anti-Coagulation finds that his wounds will refuse to stop bleeding. At the end of every round after being wounded, the creature must make a Fortitude Save (-1 per Hit Point of damage). A success means that the bleeding was light and no damage taken this round. Failure means that bleeding is profuse enough to cause 1HP of damage this. A Critical Failure means that bleeding is so profuse it causes 3HP of damage. Only a Critical Success roll from a Healing Skill check or other pertinent medical skill can stop the bleeding, otherwise the blood loss will continue for the Duration.

Brain Damage: This is direct damage to the tissues of the brain. Even mild Brain Damage can be a serious thing to a creature. Mild Brain Damage incurs a -1 Effective Intelligence until the damage can be healed. Brain Damage incurs a -2 Effective Intelligence and -1 Effective Wisdom, plus the creature suffers Memory Loss until the damage can be healed. Severe Brain Damage incurs a -D4+1 Effective Intelligence and -2 Effective Wisdom, plus the creature suffers Confusion until the damage can be healed. Extreme Brain Damage incurs a -D6+2 Effective Intelligence and -D4+1 Effective Wisdom, plus the creature suffers Vertigo until the damage can be healed.

Coma: A creature suffering a Coma is in a state of deep, prolonged unconsciousness. But more than mere Sleep or Unconsciousness, the creature has become incapable of sensing or responding to any external stimulus or need. A Coma lasts for the duration of the poison, furthermore no outside force, apart from a minor miracle, can rouse a Comatose creature until the duration has expired, even if the poison has been removed or any damage has been cured.

Dehydration: The creature suffers an excessive loss of water from the body. Treat as Thirst Danger for game purposes.

Insomnia: The creature suffers periods sleeplessness. Before bedding down, the creature must make a Fortitude Save. Success means a restless, but full night sleep. If the roll is failed, they lose a few hours of sleep that night, and will be

CHAPTER 1 - POISON RULES

treated as Drowsy until a full amount of rest can be had. More severe cases require a Fortitude Save -5. Success means they only lose a few hours of sleep that night, and will be treated as Drowsy until a full amount of rest can be had. Failure means the creature gets no sleep, and is treated as Fatigued until a full amount of rest can be had.

Kidney Damage: The Kidneys are a pair of organs that maintain proper water balance, and filter the blood of wastes. When these become damaged, a creature will have a decreased capacity against toxins in the blood, including those produced by the body. Mild Kidney Damage incurs a -2 Effective Constitution until the damage can be healed. Kidney Damage incurs a -3 Effective Constitution and -1 Effective Strength, plus the creature is treated as Shaken until the damage can be healed. Severe Kidney Damage incurs a -D6+1 Effective Constitution and -2 Effective Strength, plus the creature suffers Fatigue until the damage can be healed. Extreme Kidney Damage incurs a -2D4+2 Effective Constitution and -D6+1 Effective Strength, plus the creature is treated as Disabled until the damage can be healed.

Laryngitis: Laryngitis is a painful inflammation of the vocal cords. Any tasks that require voice are not possible until the damage has been healed or runs its course.

Liver Damage: The Liver is the organ responsible for the metabolism of carbohydrates, fats, and proteins extracted from food. Mild Liver Damage incurs a -2 Effective Constitution until the damage can be healed. Liver Damage incurs a -2 Effective Constitution, plus the creature is treated as Nauseated until the damage can be healed. Severe Liver Damage incurs a -3 Effective Constitution, plus the creature suffers both Fatigue and Nausea until the damage can be healed. Extreme Liver Damage incurs a -4 Effective Constitution and -1 Effective Strength, plus the creature is treated as both Nauseated and Exhausted until the damage can be healed.

Lung Damage: The Lungs are respiratory organs that remove carbon dioxide from the blood and provide it with fresh oxygen. A creature with Mild Lung Damage is treated as Entangled until the damage can be healed. A creature with Lung Damage incurs a -1 Effective Constitution, and is treated as Entangled until the damage can be healed. Severe Lung Damage incurs a -2 Effective Constitution, plus the creature suffers Fatigue until the damage can be healed. Extreme Lung Damage incurs a -2 Effective Constitution, plus the creature is treated as Exhausted until the damage can be healed.

Nerve Damage: Nerves carry impulses to and from the brain and other parts of the body, such as the muscles. Mild Nerve Damage incurs a -1 Effective Dexterity until the damage can be healed. Nerve Damage incurs a -2 Effective Dexterity, plus the creature is treated as Shaken until the damage can be healed. Severe Nerve Damage incurs a -4 Effective Dexterity, plus the creature is treated as Entangled until the damage can be healed. Extreme Nerve Damage incurs a -D6+2 Effective

Dexterity and -1 Effective Strength, plus the creature is treated as Stunned until the damage can be healed.

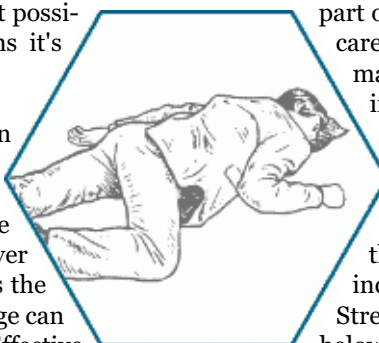
Paralyzation: The creature or creature's limb has been rendered partly or completely unable to move or feel sensations. Treat as Paralyzed for gaming purposes.

Reduced Healing: The creature has a reduced capacity for natural healing, and a resistance to external healing attempts. All healing is reduced by 25%.

Shock: Shock is a failure of the circulatory system characterized by depression of various vital signs. A creature going into Shock has a -4 Effective Constitution, but may still move and perform tasks at a -2 penalty for the next 2D6 Rounds. Each round after this, the creature must make a Fortitude Save -5 or become Unconscious for the remainder of the Duration.

Sleep: The creature cannot stay awake. Treat as Sleep spell for game purposes.

Spine Damage: The Spine is a column of bone that protects the main bundle of nerves for the body. Damage to this part of the body can mean the end of an adventuring career if medical science is not advanced enough or magic healing is unavailable. Mild Spine Damage incurs a -2 Effective Dexterity, plus the creature suffers Severe Localized Pain until the damage can be healed. Spine Damage incurs a -4 Effective Dexterity and -1 Effective Strength, plus the creature is treated as Staggered until the damage can be healed. Severe Spine Damage incurs a -8 Effective Dexterity and -3 Effective Strength, plus the creature suffers Paralyzation below the point of injury until the damage can be healed. Extreme Spine Damage incurs a -10 Effective Dexterity and -4 Effective Strength, plus the creature suffers Permanent Paralyzation.



Stroke: A Stroke is a blockage or rupture of a blood vessel in the brain that causes terrible damage. Treat as Permanent Severe Brain Damage.

Unconsciousness: This creature is temporarily lacking consciousness! Treat as Knocked Down and Helpless for game purposes.

Vessel Damage: The Blood Vessels of the creature have become damaged and cannot efficiently deliver blood. Any Critical Failures require the creature to make a Fortitude Save or immediately "black-out". The creature is then treated as Unconsciousness for D4 Rounds.

POISON DC

Each time poison damage is applied, the creature must make a Fortitude Save against the poison's DC (which could be modified by Multiple Doses). Success means that the Save conditions are applied. This could mean a reduction or elimination of Duration or individual Damage. Failure means the damage or duration continues unhindered.

CHAPTER 1 - POISON RULES

The DC of a poison also serves as the Craft DC and Detect DC. This is used to make any necessary Craft checks when refining or extracting a specific quantity of the poison, and also when using appropriate skills to detect the poison in food, autopsies, etc.

CRAFTING POISONS

To craft a poison, a character requires either the Alchemy Skill or Craft (Chemical) Skill, but with the following addendums: Obtaining Formulas, Gather & Prepare Raw Materials and Possess Alchemy or Chemistry Equipment.

STEP 1 - OBTAINING FORMULAS

Just because you know a plant or animal to be poisonous, it does not mean you know the proper dosages of its venom to poison someone. or how much is deadly. A character must acquire individual formulas before any poison can be crafted or used properly.

A character starts with knowledge of Intelligence*Rank of Alchemy Skill (or Craft (Chemical) Skill) formulas maximum. For example, a PC with 2 ranks and an Intelligence of 12 will start with 24 formulas. Additional formulas may be researched in the lab, found in ancient tomes or modern texts, bought or traded for, stolen from competitors or even given as payment for services rendered. One thing is for certain, assassins jealously guard their poisons and those in power and need are constantly on the look-out for those who have knowledge of these toxins.

ANTIDOTES

It is assumed, for game purposes, that if a player has knowledge of a particular poison formula, then that player also can formulate a suitable antidote for said poison before hand. If the poison is a new discovery, then an antidote must be formulated with working Alchemy/Chemistry equipment, having the same methods, bonuses and restrictions as crafting a poison. If the antidote is crafted and administered successfully, the character may add the antidote formula to his Diary.

Venom Antidote, or Antivenin, is drop for drop one of the most valuable and costly substances in the world. Specially prepared antivenins are the only antidote for deadly animal bites & stings. They are made by injecting large animals with close to lethal doses of a specific animal venom until the animal develops immunity to the toxin. Serum, the thin, watery fluid component of blood is then extracted and processed as an antivenin. The most commonly used animal is the horse, but other farm mammals can be used. Increasing doses of venom are injected into the blood until the animal eventually becomes hyper-immunized. The immunized blood is drawn and the serum removed. The serum then passes through various stages of refinement before it is released for use on humans. The main purpose is to extract immunoglobulin. These are processed by the body to isolate the antigens that causes the production of antibodies to neutralize the venom.

These antivenins are very practical, however since they are an animal protein derivative there is a small percentage of people who react dangerously to it. They display a hyper-allergic reaction that can lead to a possibly fatal anaphylactic shock. In

a hospital situation, a cocktail of antihistamines and hydrocortisones are administered. Then a small test sample of antivenin is administered and the reaction noted before a full dose is injected. When this test is administered the character must make a Fortitude save with a +2. If the test is passed, the character may be administered a full dose of serum. If the test is failed, the character will receive no benefit from the serum, and in fact will suffer double-damage if the serum is administered.

To calculate the dose of anti-venom needed for a particular patient one has to take into account various aspects. However for the purposes of game play, use the dosing chart.

Minimal Envenomization: 50mg are given if symptoms are mild.

Moderate Envenomization: 100mg vials are given if symptoms are moderate, paralysis, or bleeding occurs.

Severe Envenomization: 250mg are given if symptoms are severe or the victim is unconscious.

Monovalent Serums: The production of serum from a single venom is known as a monovalent antivenin and will only counteract the specific animal venom administered to the animal. A monovalent serum will give the victim another chance to save, plus add a +10 to the save against its specific venom derivative. Further it will reduce damage, duration and recovery time by an additional 50%.

Polyvalent Serums: When a cocktail of venoms is used in the hyper-immunization process the serum produced is a polyvalent serum and is effective against a range of venoms. However the addition of each venom causes a loss of efficiency and potency in the antivenin as a whole. So a delicate balance of like venoms is usually used to produce an antivenin against the known animals of a given area.

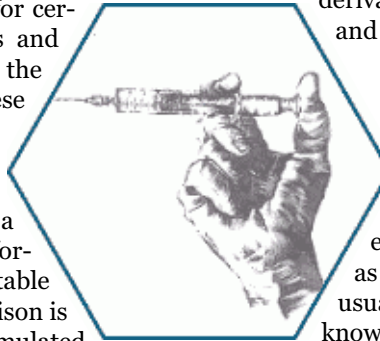
A bivalent serum will give the victim another chance to save, plus add a +6 to the save against one of two specific venom derivatives. Further it will reduce recovery time, damage, and duration by an additional 40%.

A trivalent serum will give the victim another chance to save, plus add a +1 to the save against one of three specific venom derivatives. Further it will reduce damage, duration and recovery time by an additional 25%.

STEP 2 - GATHERING & PREPARING RAW MATERIALS

Poisons and raw materials for poison are rarely sold in stores, so an assassin who wants to be assured of pure ingredients must often go looking for them at the source. This can be as simple as a walk to the local greenhouse or a difficult breaking-and- entering. It takes about 10 minutes per DC point of the poison to find a large enough amount of common poisonous materials to use, be it animal, vegetable, or mineral.

It is possible, and advisable, for a character to prepare extra ingredients when abundant and easily to obtain. They may also cultivate a garden, raise poisonous animals or stockpile chemicals. This allows a character to keep the special ingredients on hand, so there is no need to scramble around searching for that special chemical compound or certain red-backed spider.



CHAPTER 1 - POISON RULES

HARVESTING & PRESERVING MATERIAL

Harvesting plants and extracting venom for raw materials is the least expensive method of obtaining poisons and poison components. A great deal of material can be gathered when abundant and stored for later. Many assassins will cultivate a secret garden or snake pit for this purpose. Besides being inexpensive and convenient, it insures the assassin a measure of secrecy and assures quality poisons.

Bark

Preparation Time: 1D4 Weeks

Shelf Life: Two Years

The bark from shrubs is easily collected by scraping the trunk and stems with a knife or dagger. The bark is then scraped and cut into manageable sizes for drying. Dried bark can be boiled or ground into a fine powder.

Bulbs

Preparation Time: 2D4 Days

Shelf Life: Two Years

Bulbs are cut from the root system with a knife, then dug up. In dry conditions, bulbs can be left in the field to cure. Curing allows the natural dormancy of the poison to develop and also dries out the bulb to protect against disease. A bulb that has been cured correctly will have a dry, shrunken neck and dry outer scales.

Flowers/Flower Buds

Preparation Time: 1D6+6 Days

Shelf Life: Indefinite

Choose flowers just before their peak or at their peak as many flowers continue to mature even after picking. Hang flowers upside down in a dry, warm environment, out of direct sunlight. Flower buds should be picked when they are no more than 2" across. Heads that have any flowers already open are past their prime. The smaller and more compact the head is, the more potent it will be.

Fruit/Berries

Preparation Time: 2D4 Days

Shelf Life: Six Weeks

Peels, cores, seeds or pits are removed, then the fruit is cut into thin slices. Fruit is dry when it is soft and pliable with no moist area in the center when cut.

Leaves

Preparation Time: 2D4 Days

Shelf Life: Two Years

Leaves generally have fullest concentration of oils just before flowering. Leaves can be cut after flowering, but they will be less potent. Small leaved herbs can be cut by the bunch instead of individual leaf.

Mushrooms

Preparation Time: 3D8+12 Hours

Shelf Life: Six Weeks

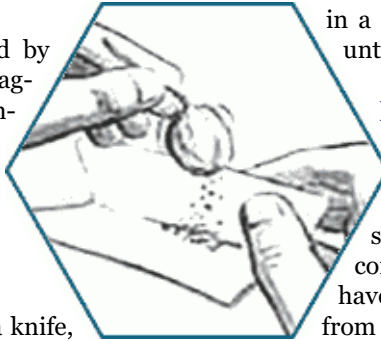
Mushrooms are prepared quickly after picking. They are quickly rinsed and all foreign material is removed. Small pieces are dried in the sun.

Pods

Preparation Time: 2D6 Days

Shelf Life: Two Years

Pods are harvested by hand, stripping pods from branches. This is a very delicate job, using the least force necessary to remove mature pods. Immature pods remain on the branch to mature for subsequent harvest. Dry pods are pounded in a mortar and pestle and the powder dried again until moisture content is gone.



Pollen

Preparation Time: 2D4 Days

Shelf Life: Indefinite

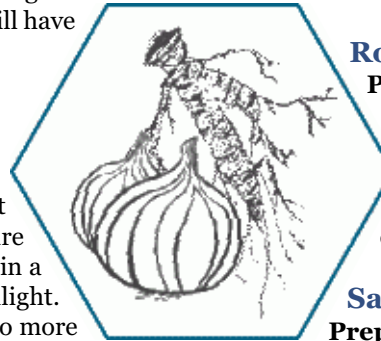
Partially opened buds are usually the best sources for pollen, because open flowers are often contaminated with pollen from other plants or have already shed the pollen. For removing pollen from a plant, a steady hand and special tools are needed. Several pairs of fine-tipped forceps, razor blades, glass or paper and small envelopes.

Roots/Tubers

Preparation Time: 1D4 Days

Shelf Life: Six Weeks

The entire plant is pulled or dug up and washed in cool water. The side roots and root hairs are trimmed off, split in half lengthwise and air dried.



Sap

Preparation Time: 2D4 Hours

Shelf Life: Indefinite

To obtain sap, a plant must be wounded by piercing the stem or by peeling off a thin layer of the bark. Most tree saps thicken and harden when exposed to the air, but some trees produce liquid resins. Air-hardened resins can be stored indefinitely in air-tight containers.

Small plants produce either watery or milky saps. Any milky sap exuded by plants is called latex. These saps can be gathered by mashing the root or plant. All latex should be reduced to syrup by boiling for long-term storage.



Seeds

Preparation Time: 1D2 Hours

Shelf Life: Indefinite

To harvest seeds from fruit or vegetables, the fruit is allowed to ripen on the vine or plant to the point that it is overripe. The fruit or vegetable is mashed gently and the seeds are soaked in water.

PREPARING POISONS

The poisonous parts of plants are usually too bulky to be

CHAPTER 1 - POISON RULES

used properly. Sometimes the amount of poison needed to do any damage requires a bushel of leaves or huge chunks of roots. By refining the poisons from the bulk of the plant, it is made easier to store and carry. Preparing the raw materials gathered from plant matter also makes the poisons simple to measure and administer and can make disguising foul odors or flavors easier.

Extract

Preparation Time: Three Weeks +1D4 Hours
Shelf Life: Two Months

An extract is obtained by steeping an ingredient in water, alcohol, ether, or a combination of these liquids and then concentrating the preparation by evaporating it, usually in a still. The ingredient is steeped for several weeks. Then the liquid is strained off and distilled until most of the liquid has evaporated and the extract has the required consistency.

Maceration

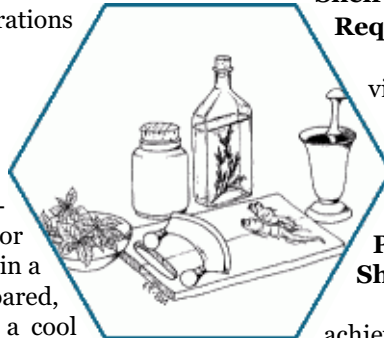
Preparation Time: 1 Day +2D12 Hours
Shelf Life: 24 Hours

Macerations are used for the most delicate herbs and flowers, which lose much of their poisons if exposed to boiling water. The plant material is soaked in water, alcohol or wine at a room temperature. Most Macerations should be used within a day or so of making.

Oil Infusion

Preparation Time: 6 Days +1D8 Days
Shelf Life: Six Months

Oils are commonly used for contact poisons. Oils are prepared by steeping fresh or dried ingredients a pure type of vegetable fat in a sunny place and then straining. Once prepared, oils must be stored in dark bottles and in a cool place, regardless of the type of oil used. Oils make the best contact poisons, as they have a thick consistency, rarely have a noticeable odor, and retain potency for a long time.



Syrup

Preparation Time: 20 minutes +1D10 Minutes
Shelf Life: Two Years

Syrups can be made by adding sugar to an infusion and boiling until the excess water has evaporated. This sweetness can sometimes disguise foul flavors and the thick poison can be stored longer. The proper poison syrup can also be used as a short-term contact poison.

Trituration

Preparation Time: 10 Minutes + Drying Time
Shelf Life: One Year

Trituration is the grinding of dried materials in a mortar with a pestle or adding Extracts to an inert powder. Powders are a favored type of poison among professionals. They are easy to manufacture and dose, relatively easy to store and simple to administer in food or beverages. Dry powders can also be placed inside empty capsules made from a gelatin that dissolves in liquid. This method is preferred when time isn't an issue, since the drying of plant material takes some time.

Surgical Extraction

Preparation Time: 1D4 Hours
Shelf Life: 24 Hours/One Month (Refrigerated)

Most common is the surgical removal of the venom-producing organ, especially when dealing with low technology or unusual creatures. This always kills the animal and provides only a minimal amount of toxin in most cases, unless large numbers of animals are dissected. The amount of venom extracted depends on the animal.

Milking (Snake)

Preparation Time: 1D4+3 Hours
Shelf Life: 24 Hours/One Month (Refrigerated)
Requirements: 4Ranks of Handle Animal Skill

A small container is covered with an elastic or leathery sheet and secured. A handler then carefully holds the snake by the head and gently forces the fangs into the sheet. Venom is extracted with gentle pressure on the venom glands. The instincts of the agitated snake cause it to discharge 4oz of venom into the container.

Negative Pressure Extraction

Preparation Time: 2D6 Hours
Shelf Life: 24 Hours/One Month (Refrigerated)
Requirements: 6Ranks of Handle Animal Skill

Fangs or stingers are inserted into thick, soft vinyl tubing. The mouth is suctioned with a pipette attached to a vacuum trap. This is more difficult than milking, but yields double the venom.

Electrolysis Milking

Preparation Time: 1D4+3 Hours
Shelf Life: 24 Hours/One Month (Refrigerated)

Venom extraction from insects can be achieved by electrical stimulation of the fangs or stinger into microfuge tubes. The scorpion's cauda is placed in a small trough is grazed with direct current.

STEP 3 - ALCHEMY/CHEMISTRY EQUIPMENT

The laboratory must be set up in an enclosed area in a fixed and stable location. A constant temperature must be maintained, and the area must be protected from drafts, humidity, excessive sunlight, excessive smoke, and any kind of vibration. Tool Sheds, Inn Rooms, Houses, Motel Rooms, Basements, Cargo Vans, Dungeon Rooms, and Covered Wagons can all be acceptable if they meet these parameters.

If a lab must be moved or for any reason needs to be set up again, this can be achieved. It takes 8 hours for a lab to be properly packed. Failure to properly pack a lab before moving results in a loss of lab chemicals and equipment. This subtracts from the DC bonus normally granted for a complete and functioning lab. This loss is determined at the GM's discretion.

A lab that has been set up in a vehicle must also be packed before moving and set up before use by the same rules, or suffer the same losses and damage, plus an additional loss of -2, due to spills, breakage and even possible fires. Fortunately, mobile labs are designed to be easy to move, so packing a mobile lab takes only D2 hours.

CHAPTER 2 - ARACHNID VENOMS

SCORPIONS

Scorpions have, since the earliest civilizations, captured both the fascination and fear of man. People certainly have good reason to fear scorpions.

SCORPION MYTH AND LORE

In Babylonian mythology, the Scorpion Men were fearsome warriors. They were the children of Tiamat, the mother-dragon of the universe. Half-man and half-scorpion, they had human heads and arms and were scorpions from the waist down, with powerful tails that they used in combat. They also fought with their bows and arrows, which never missed. The Babylonians believed the Scorpion Men were the sacred guardians of their sun god, Shamash.

In a Greek legend, Orion was a follower of Artemis, the goddess of the hunt. Eventually, Orion is said to have raped one of Artemis' female companions, and she decided to kill him for it. Artemis sent the Scorpion after Orion, which tracked him down and killed him with his sting. Orion was then given a place among the stars, far away from the Scorpion to keep him safe. You can still see the constellation of Scorpio rising just as Orion is setting on the western horizon!

The ancient Egyptians believed in a scorpion goddess with a woman's head, named Meretseger, though she would also appear as a cobra. She protected the Valley of Kings, where all the Egyptian pharaohs lay buried. Meretseger would spit venom at anyone who tried to disturb a pharaoh's tomb. The people of Deir el-Medina (those who built the royal tombs) thought she would punish workers who committed crimes. But if the criminal truly felt sorry for what had been done, Meretseger would quickly heal the wound.

Many Egyptian legends feature scorpions, notably the story of Isis, the wife of Osiris, and her travels to the Town of the Two Sisters to escape Osiris's evil brother Set. Seven scorpions traveled with Isis to protect her, and every night she warned the scorpions to be careful and speak to no one, for fear of Set. They came to the Town of the Two Sisters, along the Nile delta. In her fear of Set, a wealthy noblewoman shut the door to her home as she saw the goddess and her companions approach. Instead a poor farmer's daughter offered the Goddess a place in her humble home.

Six of the scorpions, angered by the noblewoman's behavior, gave their venom to the seventh, Tefen, who crawled under the door of the lady's house and stung her son. As the boy was dying, she wandered through the town looking for help. Isis heard her cries and decided to save her son, even though the woman had been inhospitable to her. She named each of the seven scorpions, showing power over them and detoxifying their combined venom. The noblewoman was so impressed by Isis' unconditional kindness, she awarded her and the peasant girl all she owned.

Every April 23, parts of Mexico celebrate the feast day of San Jorge, patron saint of protection against scorpions. The feast was instituted in 1740 by Bishop Pedro Anselmo Sanchez de Tagle, who prayed that God would "placate his ire and

destroy the scorpions and other deadly insects with which this country is inundated."

UNDERSTANDING SCORPIONS

Scorpions are venomous arthropods that belong to the class Arachnida and are considered relatives of spiders, mites, and ticks. There are approximately 1,100 species of scorpions known worldwide.

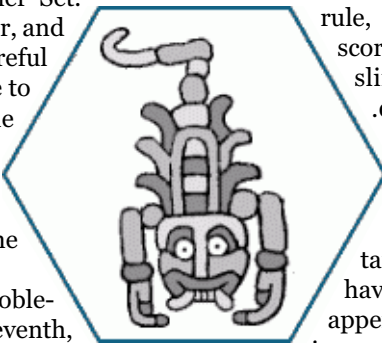
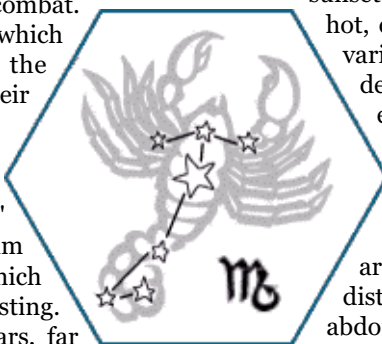
Most scorpions are nocturnal, hiding under rocks, in cracks, or within burrows during the day, and coming out after sunset. Although they are normally associated with hot, dry areas like deserts, scorpions are found in a variety of habitats including grasslands, savannas, deciduous forests, mountain pine forests, rain forest, and caves. Scorpions have even been found under snow-covered rocks at elevations of over 12,000 feet in the Andes Mountains of South America and the Himalayas of Asia.

Scorpions are easily distinguished from other arachnids by their large, well developed claws and distinct division of the abdomen into a broad pre-abdomen seven segments long and narrow, tail-like post-abdomen five segments long.

Scorpions have a unique pair of sense organs called pectines on their backs. These are usually larger and contain more "teeth" in the male than the females. They are used to sense textures of surfaces they walk across and serve as chemical receptors to their own species of scorpions.

All scorpions possess a poisonous sting that contains a pair of venom glands. These can paralyze prey or deliver a painful sting to the incautious. Scorpion venoms are complex mixtures of neurotoxins with other substances and each species has a unique mixture. Despite a bad reputation, only one species in the U.S. and about 20 others worldwide have venom potent enough to be considered dangerous to humans. Most other scorpion venom is the equivalent of a strong bee sting; painful, but only dangerous to people with severe allergies. As a rule, the thicker the claws, the less dangerous the scorpion. The viciously venomous ones usually have slim pincers. If extracted, the glands provide .00001oz(.5mg) of venom. A scorpion will produce .000007oz(.2mg) of venom per milking, and they may be milked three times per 24 hour period.

Besides their unusually long and dangerous tails, scorpions also differ from other arachnids in having large pedipalps. These are the second pair of appendages on the body, and are usually rather inconspicuous in arachnids. However in scorpions, they are large and powerful pincers that are used to grasp and subdue prey. Prey includes a variety of arthropods and other invertebrates, and the larger species are known to prey on small vertebrates, such as smaller lizards, snakes, and mice. Prey is located primarily by sensing vibrations. The pedipalps have an array of fine sensory hairs called trichobothria that sense air-borne vibrations. The tips of the legs also have small organs that detect vibrations in the ground. The surfaces of the legs, pedipalps, and body are also covered with thicker hairs called setae that are sensitive to direct touch. Even though they are equipped with venom to defend them, scorpions fall prey to



CHAPTER 2 - ARACHNID VENOMS

many types of creatures, such as centipedes, tarantulas, insectivorous lizards, birds, and mammals.

Scorpion mating rituals are enacted when a male uses his pedipalps to grasp a female's pedipalps in order to lead her on a 'courtship dance'. The details of courtship vary from species to species, with some exhibiting a deliberate and prolonged sexual sting by the male. The male sweeps his pectines over the ground surface to help locate a suitable place to deposit his spermatophore, which contains sperm to fertilize the female eggs. The male pulls the female over the surface where she draws the sperm into a genital pore that is located near the front underside of her abdomen. Scorpions have a long gestation period varying from several months to a year. As the embryos develop in the female, nutrients are transferred from the digestive gland to the embryos. The young are born live and use the mother's legs to ascend to her back.

On the average, a female gives birth to about 25 to 40 (5D4+20) young. They remain on her back until they molt for the first time, which is usually within a week or two after birth. Once they climb down, they assume an independent existence, and periodically molt to reach adulthood. Typically 5 or 6 molts over 2 to 6 years are required for the scorpion to reach maturity. Adult scorpions range in size from .5" to 9" in length.

The average scorpion lives three to five years, but some species can live up to 10-15 years. A few scorpions exhibit social behaviors beyond the mother-young association, such as forming unorganized masses during overwintering, colonial burrowing, and even living in extended family groups that share burrows and food.

All scorpions fluoresce under ultraviolet light, also known as blacklight. The fluorescence is caused by an unidentified substance in a very thin layer in the cuticle of the scorpion called the hyaline layer. Freshly molted scorpions do not fluoresce much, but as the new cuticle hardens, the fluorescent quality increases. Alcohol in which scorpions have been preserved may also fluoresce. This unusual feature can make scorpions easier to collect and observe. When darkness falls, portable UV lights can be flashed where scorpions are assumed to be. Scorpions caught in the nearly invisible UV light glow an eerie greenish color, making them easy to spot in the darkness. Anyone equipped with UV light may "take 10" to spot scorpions at night.

ANDROCTONUS AMOREUXI

Common Name(s): Golden Fat Tail, Libya Gold Scorpion

Dosage: .026oz(750mg)

DC: 22

Onset: 1D6 Minutes

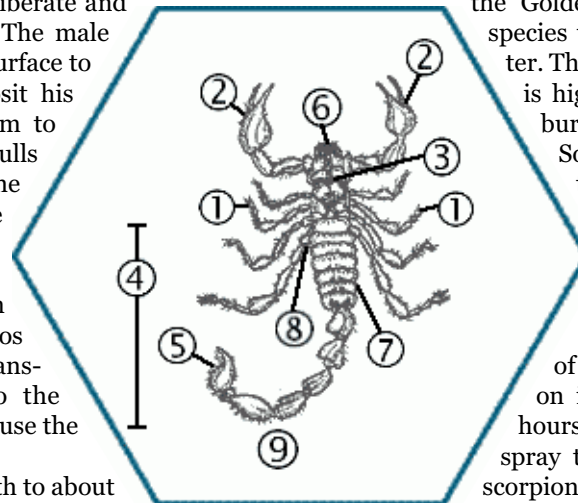
Duration: 6D4 Hours

Symptoms: Blindness (Venom Spray), Convulsions/Seizures, Dizziness, Fever, Nausea/Vomiting, Numbness, Minor

Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Coma, 1D10+20, 1D2 Per Sting

Save: Save Vs Coma, Reduce Duration By 75%



Native to the deserts and sandy terrain in Northern Africa, the Golden Fat Tail Scorpion is a terrestrial species that lives under rocks and other shelter. They avoid coastal areas or anywhere that is high humidity. Most are not known for burrowing, but they do hide under rocks.

Some individuals may burrow from time to time. Unfortunately, their hiding places are often located near humans.

For example, the Yellow Fat Tailed Scorpion often hides in crevices in walls made of stone or brick.

The Golden Fat Tail Scorpion is one of the most dangerous species of scorpion in the world. Its sting is fatal within hours, and it can flick venom off its tail in a spray to blind an attacker. Most accidental scorpion deaths are attributed to this scorpion.

ANDROCTONUS AUSTRALIS

Common Name(s): Black Tip Fattail Scorpion, Yellow Desert Scorpion, Yellow Fat Tailed Scorpion

Dosage: .011oz(320mg)

DC: 23

Onset: 1D6 Minutes

Duration: 6D4+5 Hours

Symptoms: Blindness (Venom Spray), Convulsions/Seizures, Dizziness, Fever, Nausea/Vomiting, Numbness, Minor Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Mild Cardiac Failure 4D30+20, 1D4 Per Sting

Save: Save Vs Mild Cardiac Failure (Reduces Damage by 50%), Reduce Duration By 45%

- 1: 4 Pairs Of Legs
- 2: 2 Pincers (*Pedipalps*)
- 3: Fused Head & Thorax (*Prosoma/Cephalothorax*)
- 4: Body Segments (*Opisthosoma*)
- 5: Sting (*Telson*)
- 6: Combs (*Pectiens*)
- 7: Genital Flap (*Operculum*)
- 8: Leg Junction (*Sternum*)
- 9: Tail (*Metasoma*)

This scorpion is nearly identical in appearance and habitat to the *Androctonus Amoreuxi*. They do, however, have longer tails, and adults are an average .5" shorter overall.

ANDROCTONUS BICOLOR

Common Name(s): Blacktail Scorpion, Sinai Desert Scorpion

Dosage: .039oz(1.12G)

DC: 23

Onset: 3D6 Minutes

Duration: 6D4+5 Hours

Symptoms: Convulsions/Seizures, Dizziness, Excessive Sweating, Fever, Numbness, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Asphyxiation 3D20+10, 2D6 Per Round, 1D2 Per Sting

Save: Save Vs Asphyxiation (Reduces Damage by 60%)

Found in a variety of habitats and elevations, from pine forests, desert flats, rolling grasslands, to the rocky slopes of mountains to about 7,000 feet or more. They are not known to occur in dunes, but have been found in sandy areas near

CHAPTER 2 - ARACHNID VENOMS

deserts. It is primarily a burrowing species, but it can be found under rocks and debris also.

This species varies very much in color. Some populations are yellow-brown with black legs and darker telson. Others have dark brown bodies. Some populations are also light brown, almost orangish in color. Because of these variations, colors are not a safe identifier.

This is a quick and mean tempered species, that will sting readily. Even though wide-spread in a variety of habitats, they are rare. While not easy to find, when one is found, there will be 1D6 more not far away.

ANDROCTONUS CRASSICAUDA

Common Name(s): Asian Fat Tail

Dosage: .008oz(250mg)

DC: 27

Onset: 3D6 Minutes

Duration: 6D4+5 Hours

Symptoms: Blurred Vision, Convulsions/Seizures, Difficulty Speaking, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Coma, Paralyzation, Shock, 2D6 Per Hour

Save: Save Vs Coma, Reduce Duration By 25%

Adults average about 2.4" in length, with the tail being longer in the males than in the females. Body color of adults varies from yellowish to tan, marked with broad, blackish stripes on the upper surface of the abdomen. There is a dark triangular mark on the front portion of the head region in the area over the eyes. Younger specimens may be overall lighter in color, and the base of the pedipalps and the last segment of the body is dark brown to black. The key recognition characters for this species are the slender pedipalps and the long chubby tail.

They have a distinct association with dead vegetation, fallen logs, and human dwellings. Wild specimens can be quite aggressive, but handling for some time tames them quickly. The large pedipalp is capable of drawing blood and some wild ones do not hesitate to use them. They appear very reluctant to use their tail in most cases.

ANDROCTONUS MAURITANICUS

Common Name(s): Arabian Fat Tailed Scorpion, Black Fat-Tailed Scorpion, Egyptian Gold Fat Tail

Dosage: .024oz(690mg)

DC: 21

Onset: 1D6 Minutes

Duration: 6D4+5 Hours

Symptoms: Convulsions/Seizures, Dizziness, Fever, Nausea/Vomiting, Numbness, Minor Swelling (Sting), Severe Localized Pain(Sting), Weakness

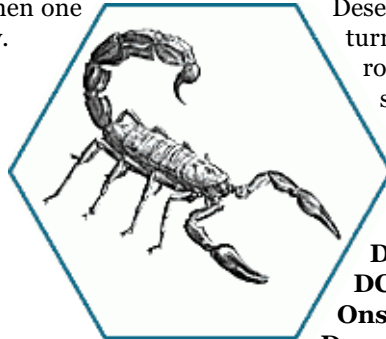
Damage: Mild Cardiac Failure 4D30+20, 1D4 Per Sting

Save: Save Vs Mild Cardiac Failure (Reduces Damage by 50%), Reduce Duration By 45%

Despite its common name, the Black Fat-tailed Scorpion

varies considerably in color, from olive brown to reddish brown to slate gray to black. A small, isolated population in Egypt is abnormally pale, hence the name Egyptian Gold Fat-tailed Scorpion. Accurate identification can only be made by experienced professionals who recognize the characteristic tail segments. Mature specimens can attain 4" in length. As with many other members of the Buthidae family, the pincers of the Black Fat-tailed are relatively small and weak, while the tail and sting are abnormally stout and muscular.

Desert scrub is their preferred habitat. They are nocturnal, venturing out from burrows, or beneath rocks, boards, and other debris to hunt insects and small vertebrates at night.



Androctonus Crassicauda

BUTHACUS LEPTOCHELIS

Common Name(s): Fat Red Tail Bark Scorpion

Dosage: .024oz(690mg)

DC: 22

Onset: 6D6 Minutes

Duration: 6D4 Hours

Symptoms: Convulsions/Seizures, Dizziness, Fever, Nausea/Vomiting, Numbness, Minor Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Mild Cardiac Failure 4D30+20, 1D4 Per Sting

Save: Save Vs Mild Cardiac Failure (Reduces Damage by 50%), Reduce Duration By 45%

This scorpion is brownish-yellow, with dark reddish brown, producing an overall spotted appearance. The tail is dark red, almost totally covered with brown spots and the eyes are surrounded by black.

Fat Red Tails are usually found around rocky hillsides, crumbling rock faces, brick walls, crawl spaces, leaf-covered areas, and log piles.

BUTHUS OCCITANUS TUNETANUS

Common Name(s): Mediterranean Yellow Scorpion

Dosage: .14oz(4.25G)

DC: 30

Onset: 1D4 Minutes

Duration: 1D4 Hours

Symptoms: Convulsions/Seizures, Diarrhea, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Mild Cardiac Failure 2D20+30

Save: Save Vs Mild Cardiac Failure (Reduces Damage by 65%), Reduce Duration By 20%

This scorpion is nearly identical in appearance and habitat to the Buthus Parabuthus. They are an average 1" shorter overall and are much more active during the day.

BUTHUS PARABUTHUS

Common Name(s): Burrowing Thick Tail Scorpion

Dosage: .1oz(3G)

CHAPTER 2 - ARACHNID VENOMS

DC: 25

Onset: 4D4 Minutes

Duration: 1D4 Hours

Symptoms: Convulsions/Seizures, Diarrhea, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Mild Cardiac Failure 2D20+30

Save: Save Vs Mild Cardiac Failure (Reduces Damage by 55%), Reduce Duration By 50%

Burrowing Thick Tails range in size from 1.5" to 5.5" long, usually longer than 2.7". Color ranges from a yellow through brown to black without any of the characteristic markings found on other *buthus* scorpions. The legs are usually lighter in color than the body. Most species have a very robust tail with the first 2 tail segments having nodes or ridges across which the sting is scraped, producing a warning hiss.

This scorpion has adapted to areas of soft to hard gritty soil. They dig shallow burrows in sand at the base of shrubs, under rock, logs or any suitable cover. The females are normally sedentary, staying at home, while males use any available cover during wanderings or may even excavate a new burrow.

BUTHUS PARABUTHUS TRANSVAALICUS

Common Name(s): Black Spitting Thicketail, Giant Fat Tail, South African Fat Tail Scorpion

Dosage: .13oz(3.95G)

DC: 30

Onset: 2D6 Minutes

Duration: 1D4 Hours

Symptoms: Blindness (Venom Spray), Convulsions/Seizures, Diarrhea, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Mild Cardiac Failure 2D20+30

Save: Save Vs Mild Cardiac Failure (Reduces Damage by 95%), Reduce Duration By 80%

The Black Spitting Thicketail will grow to a length of 4.5" to 5" in length. They are commonly seen in black or brown, but may also be a chocolate-brown color, and lighter at the legs and pedipalp with red-brown pinchers. They possess powerful cauda with numerous reddish hairs.

This scorpion is considered to be the most venomous species of scorpion in Africa. Even though this species has small pinchers, their main means of defense is spraying venom on prey and enemies. In the wild the Black Spitter feeds on lizards and small insects.

This species is able to squirt venom up to 5' away, and venom in the eyes can be very dangerous. Victims experience severe pain and temporary blindness, and the venom will permanently blind sight if the venom is not flushed within 5 rounds.

Centruroides Exilicauda

(BEFORE 1990: *CENTRUROIDES SCULPTURATUS*)

Common Name(s): Arizona Yellow Bark Scorpion, Bark Scorpion

Dosage: .001oz(1.12G)

DC: 19

Onset: 5D6 Minutes

Duration: 6D4 Hours

Symptoms: Convulsions/Seizures, Dizziness, Fever, Frothing, Numbness, Minor Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Mild Cardiac Failure 3D30+20, 1D4 Per Sting

Save: Save Vs Mild Cardiac Failure (Reduces Damage by 100%), Reduce Duration By 75%

As the only seriously toxic US species, it may be distinguished from other less toxic species by its very slender tail segments and long slender pinchers. Reaching only 1.5" at maturity, it is a comparatively small scorpion. The body is a yellowish/golden-brown or straw colored and the color becomes darker with age.

The majority of poisonings occur at night during the warm summer months. Its common name reflects its habit of hiding in the bark of trees. Unfortunately, they also like to hide in the drains of sinks or in shoes at night. They like any moist, dark, protected place. A sweaty shirt thrown on the floor can also make an inviting hideout.

When confronted or disturbed by large animals or people they will attempt to run away and hide if possible. They will sting in self-defense if cornered, but are not considered to be aggressive. Luckily they are naturally confined to the southwest mostly.

CENTRUROIDES NOXIUS

Common Name(s): Mexican Crystal Scorpion

Dosage: .039oz(1.12G)

DC: 17

Onset: 1D4 Minutes

Duration: 4D6 Hours

Symptoms: Blurred Vision, Convulsions/Seizures, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Internal Bleeding, 1D6+6 Per Minute

Save: Save Vs Internal Bleeding (Reduces Duration By 50%)

The entire body is yellow with variable dusky pattern, usually there are two longitudinal dark bands over the mesosoma and the pedipalps and legs are spotted. The pattern may be absent in some specimens or populations. This species is very distinctive. Its light, smooth and polished chitin makes it look as if it were made of crystal. Most stings occur when the scorpion is surprised, otherwise this is a very timid and flighty specimen.

This species is found in areas with many cracks and crevices, rocky areas, forests and quite often in buildings. This is a highly adaptive species, that tolerates different climatic conditions. It is an active forager that does not burrow. It is common for this species to climb trees and walls, and many times it has been found in the attics of homes. During periods of hot weather, the scorpion may move into living areas to escape the high temperatures of the attic.

CENTRUROIDES SUFFUSUS

CHAPTER 2 - ARACHNID VENOMS

Common Name(s): Thin-Handed Scorpion

Dosage: .031oz(900mg)

DC: 35

Onset: Instant

Duration: 1D30 Hours

Symptoms: Convulsions/Seizures, Dizziness, Fever, Nausea/Vomiting, Numbness, Minor Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Coma, Paralyzation, 1D2 Per Sting

Save: Save Vs Coma, Reduce Duration By 45%

The entire body is yellow with a variable dusky pattern, similar to *Centruroides Noxius*. It has been observed that the dusky pattern may be very dark in larger desert populations.

This scorpion is mainly terrestrial, found under stones and fallen logs in dry coastal & inland areas, rarely under barks. It lives in dry vegetation ranging from desertic plains to coastal dry forests.

Alacraneros, or Mexican Scorpion Hunters, catch thousands of these scorpions each summer. Most are mounted on key rings, ashtrays, napkin holders and wall clocks that clutter the stalls of Durango's city market, a famed scorpion souvenir center. Some of the catch is also sold for scientific research, making live examples of the species easy to acquire.

CENTRUROIDES LIMPIDUS

Common Name(s): Death Reed Scorpion

Dosage: .031oz(880mg)

DC: 31

Onset: 1D4 Hours

Duration: 1D6 Days

Symptoms: Blurred Vision, Cramps, Discoloration, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Kidney Damage, Mild Kidney Failure 6D6+5, Liver Damage, Mild Liver Failure 5D20+15

Save: Save Vs Mild Liver Failure(Reduce Damage By 55%), Save Vs Mild Kidney Failure(Reduce Damage By 55%)

This a very beautiful scorpion with very showy coloration. Most of the body is yellowish, except for the pincers, the final segments of the tail and part of the abdomen, which all are blackish fading into brown then yellow.

The population of this species seems to be located in coastal regions south of the equator. The scorpion is a forest species, usually found among vegetation. Also observed on fallen trees, and hidden inside cracks and crevices in tree trunks.

COMPSOBUTHUS ACUTICARINATUS

Common Name(s): German Scorpion

Dosage: .037oz(1.05G)

DC: 28

Onset: 2D20 Minutes

Duration: 2D4 Hours

Symptoms: Convulsions/Seizures, Diarrhea, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Mild Cardiac Failure 3D10+20

Save: Save Vs Mild Cardiac Failure (Reduces Damage by 75%), Reduce Duration By 65%

This is a small scorpion. Adults are light brown to reddish in color, but immature specimens have a more creamy color with numerous brown markings on the dorsal area and on the abdomen. Adults have a hard and shiny varnish-like appearance.

This species lives under stones and fallen tree trunks, where it makes a small burrow. It has also been found under the bark of fence posts and small trees.

This an aggressive species, which will quickly raise both its tail and its pedipalps when disturbed.

HOTTENTOTA SAULCYI

Common Name(s): Skinny Stripetail Scorpion

Dosage: .047oz(1.35G)

DC: 21

Onset: 1D20 Rounds

Duration: 1D4 Hours

Symptoms: Convulsions/Seizures, Dizziness, Fainting, Incoordination, Numbness, Swelling (Sting), Weakness

Damage: Paralyzation, Shock

Save: Reduce Duration By 75%

This urbanized species is found in different, warm habitats such as gardens, under stones, in houses, in old walls. The species is not uncommon inside habitations, especially cracks and holes in walls where the mortar has crumbled away.

This is a long, thin and small species with brown and light brown body coloration. The tail, legs and pedipalps are also brownish with dark striped patterns.

HEMISCORPIUS LEPTURUS

Common Name(s): Devil Scorpion, Hell-Fire Scorpion, Mad-Leper Scorpion

Dosage: .0019oz(55mg)

DC: 38

Onset: 3D6 Hours

Duration: 1D8 Days

Symptoms: Dizziness, Excessive Sweating, Fever, Intense Thirst, Nausea/Vomiting, Numbness, Weakness

Damage: Necrosis 1D4+5 Per Hour

Save: Reduce Duration By 25%

This species has a yellow to yellow-brown color, and a dark stripe on the mesosoma. Males have a significantly longer tail than females.

Very little is known about this scorpion, but the species has traditionally been found hot and humid asian habitats. It is a highly aggressive predatory species, presumably hunting at night, often attacking with little hesitation when discovered during the day.

This scorpion's venom causes serious wounds and inflammations that look and behave like third degree burns or leprosy. These wounds are slow and difficult to heal, leaving noticeable scars.

LEIURUS QUINQUESTRIATUS

CHAPTER 2 - ARACHNID VENOMS

Common Name(s): Death Stalker, Israeli Yellow Scorpion

Dosage: .007oz (200mg)

DC: 25

Onset: 3D4 Minutes

Duration: 1D6 Days

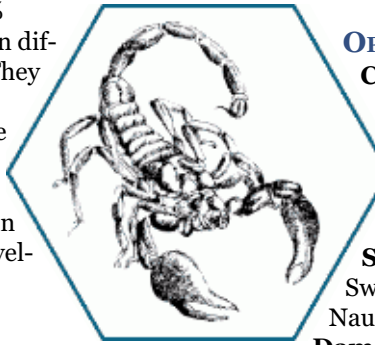
Symptoms: Blurred Vision, Convulsions/Seizures, Diarrhea, Discoloration, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Coma, Paralyzation, Shock, 2D6 Per Hour

Save: Save Vs Coma, Reduce Duration By 99%

This scorpion is found in dry desert areas on different substrate types, but not in sand dunes. They hide in small natural burrows or under stones.

The Death Stalker is a bright and attractive species, with a relatively thin tail, which is unusual for venomous scorpions. This species is aggressive and nervous, grows up to 4" in length, and is usually straw yellow to orangish yellow.



Leirus Quinquestratus

MESOBUTHUS EUPEUS

Common Name(s): Bard's Scorpion, Lyre Scorpion

Dosage: .032oz (900mg)

DC: 30

Onset: 5D4 Minutes

Duration: 6D4 Hours

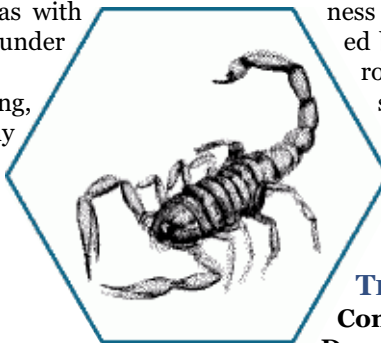
Symptoms: Blurred Vision, Dizziness, Excessive Sweating, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Internal Bleeding, 2D8 Per Hour

Save: Save Vs Internal Bleeding (Reduces Duration By 95%)

Mesobuthus Eupeus is 2" to 3" in length, and has a yellow or yellow-brown color. The granulations on the anterior part of carapace, in front of the eyes, form a lyre shape. This scorpion is often found in dry and hot areas with sparse, scrub-type vegetation, where it hides under stones and the like during daytime.

The European variety has a painful sting, but is not considered dangerous for healthy humans. Their African counterparts are much more potent, and many deaths have been attributed to these scrub scorpions.



Tityus Bahiensis

ODONTOBUTHUS DORIAE

Common Name(s): Pine Scorpion

Dosage: .035oz(1G)

DC: 38

Onset: 3D6 Rounds

Duration: 2D6 Hours

Symptoms: Blurred Vision, Convulsions/Seizures, Dizziness, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Swelling (Sting), Severe Localized Pain(Sting), Weakness

Damage: Mild Cardiac Failure 3D30+20, 1D4+6 Per Minute

Save: Save Vs Mild Cardiac Failure (Reduces Damage by 50%), Reduce Duration By 60%

This species is usually found in humid habitats like forest

floors, shielded from the heat. Large stones are used as hiding places, but some specimens are located in natural holes. This species hide deep in the ground during the warmest part of the summer. This species is often found in colonies, but each scorpion has it's own burrow.

This species averages 2.5" to 3" long, and the 19 different subspecies all vary in color. Most have a yellow to redbrown color with the tip of the claws usually dark redbrown, but some subspecies are dark brown or blackish in color. The different subspecies can be separated by the color variations, but not always.

OPISTHOPHTHALMUS GLABRIFONS

Common Name(s): Shiny Burrowing Scorpion,

Yellow Legged Creeping Scorpion

Dosage: .043oz(1.23G)

DC: 25

Onset: 1D8 Hours

Duration: 1D8 Hours

Symptoms: Confusion, Dizziness, Excessive Sweating, Fainting, Fever, Intense Thirst, Nausea/Vomiting, Numbness, Weakness

Damage: Paralyzation, Shock

Save: Reduce Duration By 85%

This species is a medium-sized scorpion with large pedipalps. Varying color, but usually yellow-brown to rust-brown. The pedipalps, legs, metasoma and telson are lighter in color than trunk and the posterior part of the carapace. Males in this species have longer and thicker tails and a more elongated pedipalp.

This species makes a loud hissing sound when disturbed. The sound is made when the scorpion rubs its chelicerae together. All scorpions in the genus *Opisthophthalmus* stridulate.

This scorpion is found in dry areas with occasional frost. Its distribution appears to be determined by soil hardness rather than soil type. Sandy soil seem to be avoided because this soil type makes it difficult to burrow. The burrows of this scorpion are often constructed with a shallow scrape under a rock that leads to the burrow. The burrows often spiral counter-clockwise as they descend. Burrows in softer soil is usually shorter than burrows in harder soil.

TITYUS BAHIENSIS

Common Name(s): Assassin Scorpion

Dosage: .0003oz(9mg)

DC: 40

Onset: Instant

Duration: 10D8 Rounds

Symptoms: Blurred Vision, Convulsions/Seizures, Dizziness, Fainting, Intense Thirst, Nausea/Vomiting, Weakness

Damage: Asphyxiation 2D20+10, Mild Cardiac Failure 3D30+20, Internal Bleeding 1D4 Per Round

Save: Save Vs Asphyxiation (Reduces Damage By 40%), Save Vs Mild Cardiac Failure (Reduces Damage by 75%), Reduce Duration By 35%

This species is found in warm habitats, and is quite com-

CHAPTER 2 - ARACHNID VENOMS

mon in ruins, in buildings, under house-hold furnishings, in crvices of walls etc. It can also be found in grass hills, under stones and in mountain forests.

This species is a small black scorpion that measures no larger than .5" to 1.2". The urban Bahiensis will tolerate a great deal of nearby activity after establishing a home, but will generally avoid heavily tread areas when looking for territory. Country cousins are very territorial and prefer dark, quiet hunting grounds with plenty of water and food.

TITYUS SERRULATUS

Common Name(s): Yellow Scorpion

Dosage: .0003oz(500mg)

DC: 14

Onset: Instant

Duration: 2D12 Rounds

Symptoms: Blurred Vision, Convulsions/Seizures, Dizziness, Fainting, Intense Thirst, Nausea/Vomiting, Weakness

Damage: Paralyzation

Save: Reduces Duration By 50%

This species is found in mountainous areas with high humidity, usually found under stones and under bark. This species is rarely associated with human activities.

This species is the largest of the tityus, with an adult length up to 1.9". The color of the body is dark brown and with yellow-brown legs and sting. It is a typical venomous scorpion with large, strong pedipalps, short, stout legs and a long, thin tail.

TITYUS TRINITATIS

Common Name(s): Red Devil Scorpion

Dosage: .017oz(250mg)

DC: 10

Onset: 1D6 Hours

Duration: 10D8 Rounds

Symptoms: Blurred Vision, Convulsions/Seizures, Dizziness, Fainting, Intense Thirst, Nausea/Vomiting, Weakness

Damage: Kidney Damage

Save: Save Vs Kidney Damage

Tityus trinitatis possesses a brown to red-brown coloring. The Metasoma has a flat black coloring toward the end. The long-drawn-out Telson is likewise flat black colored, and is covered with many large clear hairs. The tail is remarkably long, counting as 66% of scorpions total maximum length of 4"

Normally found living outdoors under the loose bark of trees and logs, under logs and stones on the ground. Around homes, they prefer wood piles, crumbling stone, brick foundations, or inside the crawlspace of a house, particularly if old building materials like lumber are stored there.

SPIDERS

Spiders have been linked to mankind for thousands of years. They are special beasts, having the ability to evoke fear, fascination, wonder, and even admiration, simultaneously. They are a living paradox, providing immeasurable benefits,

yet often producing nearly unbearable pain and anguish. Spiders have also been empowered by many cultures with mythical traits because of their abilities, their cunning, and their skill. They have been viewed as not only menacing, but as magical, mystical, and even miraculous. Nearly every culture has at least one story that tells of such wondrous qualities.

SPIDER MYTH AND LORE

Greek mythology tells of Arachne, a country girl so confident in her weaving ability that she boasted that she was the most magnificent weaver of all, including the goddess Athena herself. Challenged by Athena to a contest, Arachne won, and so angered Athena that she fled into the forest and hanged herself. Athena made amends by transforming Arachne's body into a spider and the rope into silk so that this poor peasant girl might weave for eternity the most beautiful of webs with the finest of silk. Spiders belong to the class Arachnida, so named in honor of this girl.

The myths of many ancient peoples credit the spider as being the creator of the world. Living in the underworld or in the sky, it evoked a widespread image of a huge mother spider with giant abdomen producing eggs for eternity.

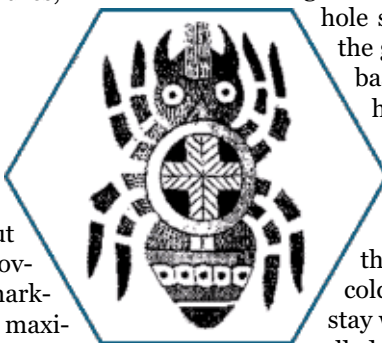
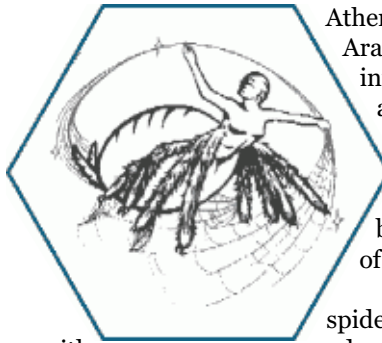
Many Native American cultures see the spider as the creator because of its weaving skills. The legends of the Pueblo and Navajo people tell of the Spider Woman, creator of all.

"In the beginning, there was dark purple light at the dawn of being. Spider Woman spun lines to form the east, west, north, and south. Breath entered man at the time of yellow light. At the time of red light, man proudly faced his creator."

Spider Woman is said to have used the clay of the earth, red, yellow, black and white to create people. To each she attached a thread of silk. This thread was the gift of wisdom.

Navajo legend also tells of a girl who found a hole in the ground from which smoke blew. At the bottom of the hole sat Spider Woman spinning a web. She invited the girl inside and taught her to weave blankets and baskets, but warned her that bad luck would befall her unless she left a hole in the center of each weaving. To this day, the blankets and baskets of the Navajo have a small hole to honor the Spider Woman.

A Cherokee legend tells of how fire came to the people. Many, many years ago, the earth was cold and dark. The Indians had no fire with which to stay warm or to cook with. There was a race of giants called The Fire People who had fire, but refused to share their treasure with the lowly other-races. All of the animals got together and decided to steal fire from The Fire People. First went the bear because he was the strongest, but he was caught and sent home. A tiny voice said, "Let me try." It was the spider. All the animals laughed and said, "You are too small." But each animal tried and failed but still the little spider said, "Let me try." Finally, since she was the only one left, they agreed to let the spider try. She fashioned a small clay pot with a lid and put it on her back and went to the village of The Fire People. She would run a bit then stop. Then she would run a bit more and stop. When she finally reached an ember, she placed



CHAPTER 2 - ARACHNID VENOMS

it in the clay pot and scurried off.

When the Fire People realized that the ember had been stolen, they began to look for it. But the little spider would run a little ways and stop, run a little ways and stop until she came to the river's edge. Just as The Fire People were about to catch her, she slipped into the water. The Fire People could not enter the river, but they thought that the water had put out the ember and thus went away. What they didn't know, however, was that the ember had baked the clay pot to be waterproof. So the little spider came out of the water and took the fire to everyone. This is the Sacred Fire of the Cherokees.

The Chibcha Indians believe that human souls must cross the river of death on rafts made of spider webs and sticks. To kill a spider is to deny a soul his rest. Such beliefs are common in cultures as diverse as West African tribes and the Teton Indians of North America. The Bhils and Mats of India also worship them as the recipients of spirits.

In Borneo, many tribes worship the spider as a primordial god. In West African mythology, the spider's silk represents a cord between God and humans. For others, it is a medium for ascending into the heavens. The Polynesians believed spider silk formed a rope that can reach to the heavens. The Pima Indians of Mexico believe that the world was created by a spider and hangs in a giant web.

West African legends tell of Anansi the Spider. He is Kwaku Anansi, the heroic trickster "Man-Spider", and is the central figure in many West African stories. He is noble, wise and clever. In one such myth, Anansi asks the sky-god for his stories so that he might share them with everyone. But the sky-god asked a great price. He wanted brought to him a python, a leopard, a nest of hornets, and a fairy. With the help of his wife, Anansi overcomes each with skill, cunning, and trickery, and delivers them to the sky-god. True to his word, the sky-god delivered his stories to Anansi to share, becoming known as "Spider Stories".

King Robert the Bruce of Scotland, after his defeat by King Edward of England in 1306, took refuge in a cave during a terrible storm. As he rested, he watched a small spider trying to spin a web across the mouth of his cave. Six times she tried, and six times she was blown down by the wind. On her seventh attempt, she succeeded. Like the spider, Robert the Bruce had tried six times before to defeat Edward's army and had failed, but watching the tiny spider surmount great odds inspired Robert the Bruce to make one last attempt. He emerged from hiding, rallied his troops, and defeated King Edward's army at Bannockburn.

Judaic tales tell of David's doubts in God's wisdom for having created such a useless creature that does nothing but spin a web and eat lowly insects. Yet when he was pursued by Saul and took refuge in a cave, God sent a spider to weave its web across the mouth of the cave. Saul and his men did not enter the cave because they felt that no one could have entered without disturbing such a large web. Similar tales are told of

Mohammed when he fled Mecca to escape from the Coreishites and of Jesus being hidden in a cave to escape Herrod's men who searched for him. The lowly, fearsome spider is credited with protecting the lives of the central figures of three major world religions.

Spiders, within a single culture, can be viewed as both good and as evil. In Britain, there is a common belief that a spider in the house is good luck. Variations on this theme occur regarding when during the day or night the spider is seen. Conversely, to kill a spider in the house will bring bad luck. A variation on this is the Money Spider. If a member of this species crosses one's palm, money will soon follow. With this and other species, many homeowners will destroy the webs but will carefully lift the spider and put it out of doors.

The German and Ukraine legends of the Christmas Spider tell the story of how the hanging of tinsel on the tree originated.

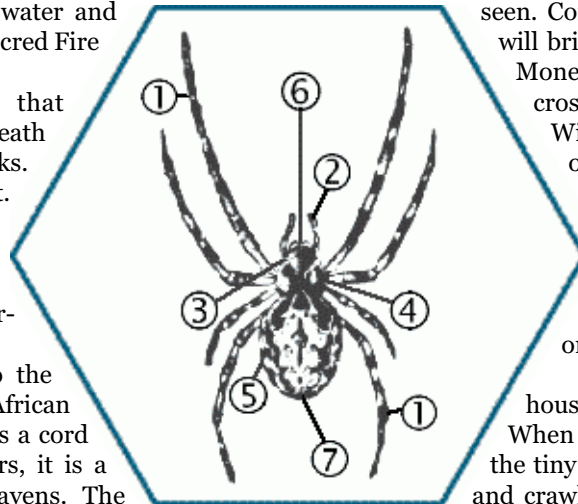
A mother busily cleaned her entire house, banishing the spiders to the attic. When she was done, and had gone to sleep, the tiny spiders crept out of their hiding place and crawled over the entire tree to look at the beautiful ornaments. In their wake, they left countless lines of silk. When the Christ child arrived to bless the house, he saw the tree and saw what the naughty spiders had done to the tree, so he touched the silk and turned it into sparkling, shimmering, silver and gold. Ever since that time, tinsel has been hung on Christmas trees and it is a custom to include a golden or silvery spider.

Although spiders have been associated with money, protection, beauty, and even the creation of the earth and the transport of the soul to the hereafter, they are still viewed by many as cunning, and sneaky, and evil. They often represent the unknown evil that lurks in the shadows, waiting patiently to entice, entwine, and evenenom. In Anglo-Saxon, the word for spider is Attercop, which means, "poisoned head."

UNDERSTANDING SPIDERS

Though insects represent the most diverse and numerically dominant group of terrestrial arthropods known, with well over a million currently described species, spiders are a distant second with about 35,000 described species. Evidence indicates that the earliest true spiders evolved between 380 and 400 million years ago in the land mass that subsequently split to form what are now North America and Europe.

Almost all spiders have only five segments in the abdomen, and these are generally fused with no external trace of segmentation, while primitive spiders had as many as twelve segments in their abdomen. The last two abdominal segments are specially modified into spinnerets which secrete the silk threads for which spiders have become well known. There are one to four pairs of spinnerets present, even on those spiders which do not spin webs. The silk has many other functions, such as in



- 1 4 PAIRS OF LEGS
- 2 PALPS (*PEDIPALPS*)
- 3 EYES (*OCELLI*) SPECIES HAVE 12, 6, 4, 2 OR 0 EYES
- 4 FUSED HEAD & THORAX (*PROSOMA/CEPHALOTHORAX*)
- 5 ABDOMEN (*OPISTHOSOMA*)
- 6 JAWS (*CHELICERAE*)
- 7 SPINNERETS

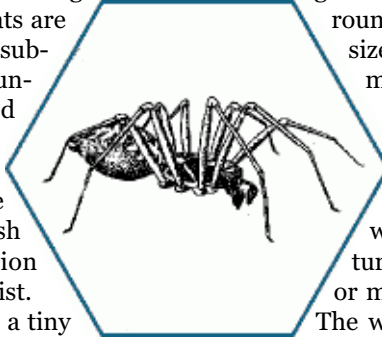
CHAPTER 2 - ARACHNID VENOMS

Save: Reduce Duration By 25%, Save Vs Shock

Members of this family build a sack-like, silken tube in foliage or under bark or stones as a lair. In nature, this species are usually found in foliage, but some species are found inside houses and around other human developments. Once indoors, they may build their silk retreats in the upper corners and the ceiling-wall junctions of rooms and rest there during the day, in basements and crawl spaces, retreats are found where joists and band boards meet the sub-flooring. At night, sack spiders are often seen running on the ceilings and walls, but if disturbed they readily drop to the floor and seek cover.

These spiders are relatively small, being only about .40" long, and are yellow to pale green in color. They are difficult to distinguish from one another, and species identification requires examination by an skilled arachnologist.

Female sack spiders lay about 250 eggs in a tiny silken sack which is brown, oval to flask-shaped, with a tough, papery cover. There may be more than one sack in the web at a time, and a female may produce up to 17 sacks in her lifetime. The sacks are usually located in the center of the web but may be moved to warmer or cooler sites as required. The eggs hatch in about 7 to 10 days.



Cheiracanthium Inklusum

Cheiracanthium Brevicalcaratum
Common Names: Golden Sack Spider, Yellow Sack Spider

Cheiracanthium Mildei
Common Names: Cave Dwelling Sack Spider

Cheiracanthium Inklusum
Common Names: Long-Legged Sack Spider

Cheiracanthium Mordax
Common Names: Stout Bodied Sack Spider

Cheiracanthium Japonicum
Common Names: Japanese Sack Spider

Cheiracanthium Puncturium
Common Names: Thorn Finger Sack Spider

LATRODECTUS VENOM

Dose: .005oz(140mg)

DC: 12

Onset: 1D4 Hours

Duration: 1D6 Days

Symptoms: Body Aches (Legs), Cramps, Headache, Labored Breathing, Nausea/Vomiting, Minor Swelling (Bite), Severe Localized Pain(Bite), Sweating

Damage: Paralyzation, Mild Asphyxiation 6D8

Save: Save Vs Paralyzation, Save Vs Mild Asphyxiation (Reduce Damage By 100%), Reduce Duration By 50%

Of all spiders, the Widow is the most notorious. The female's venom is especially poisonous to people. Despite its reputation, this spider often attempts to escape rather than bite, unless it is guarding an egg sack or if it is cornered. During the period shortly following mating and laying of eggs, the female widow can be a little cranky and hungry. The female sometimes eats the male. The female widow stores sperm, producing more egg sacks without mating so she only has to mate once in her life. After this period, if still alive, the male lives quite comfortably, eating prey captured by the female. His

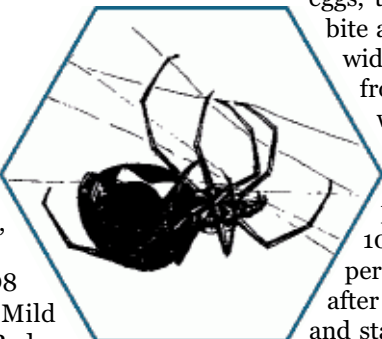
development of venom stops as the male matures, thus making him less of a potential problem than his female counterpart.

The male widow spider's abdomen is more elongate than that of the female, with white and red markings on its sides. The female's abdomen is almost spherical, usually with a red hourglass mark below or with 2 transverse red marks. The female is the most easily recognized, her shiny body giving great contrast to the red hourglass marking on her round abdomen. The male is tiny, being 1/10th the size of the female. The legs of the male are also much longer in proportion to his body than that of the female. Males do possess venom and could conceivably bite, but it is unheard of and so they are not considered a threat to humans.

The female widow spider rarely leaves her web, leaving only if forced by adverse temperatures or destruction of the web. As they never hunt or move about, widow spiders are practically blind.

The web it constructs is an irregular, tangled, criss-cross web of rather coarse silk. The core of the web is almost funnel shaped, woven into a tunnel in which the female spider spends the majority of daylight hours. They are found in any protected place indoors, closets, attics, basements or outside, under woodpiles, animal burrows, barns and beneath ground cover. This web is altered and rebuilt in a regular basis and is capable of capturing rather large insects. The female wraps any captured prey with her silk, repeatedly turning her victim with her legs as she applies more silk. After her victim is covered in silk, the spider kills her prey by injecting her venom. The prey might be eaten immediately or reserved for a later feeding. After the prey is fed upon and the body fluids are sucked from the victim, the carcass is cut loose and allowed to drop to the ground. The female widow is most often found hanging upside down in her web, where she spends most of her daytime hours. She stays close to her egg mass, defensively biting anything that disturbs her or her egg sack. After laying her eggs, the female widow is hungry and more likely to bite a human. Occasionally, bites occur from hungry widow spiders when a hand or foot is dangled in front of the nest. Before indoor plumbing, bites were fairly frequent in outhouses, particularly on male genitals.

Egg sacks are pear shaped or oval, brown, papery and about .5" long. They hold from 20 to 1000 or more eggs, which have an incubation period of 20 days. The spiderlings disperse shortly after emerging, tearing an opening in the egg sack and stay near the sack. After several hours, these spiderlings release long silken strands which they use like a parachute to ride the wind to other areas and scatter. Adult growth requires two to three months, and older females die in fall after egg laying.



Latrodectus Hesperus

Latrodectus Bishopi
Common Names: Red Widow

Latrodectus Lugubris
Common Names: Asian Black Widow

Latrodectus Hesperus
Common Names: Western Black Widow

Latrodectus Mactans Hasselti
Common Names: Katipo, Redback Spider

Latrodectus Geometricus
Common Names: Brown Widow

CHAPTER 2 - ARACHNID VENOMS

Latrodectus Mactans
Tredecimguttatus

Common Names: European Black Widow, Malmignatte

Lactrodectus Pallidus

Common Names: Desert Widow,

Sailor's Widow

Latrodectus Variolus

Common Names: Northern Black Widow

Loxosceles Arizonica

Common Names: Arizona Brown Spider

Loxosceles Blanda

Common Names: Big Bend Recluse

Loxosceles Deserta

Common Names: California Brown Spider, Desert Recluse

Brown Spider

Loxosceles Laeta

Common Names: South American Brown Spider

Loxosceles Martha

Common Names: Martha's Recluse

Loxosceles Palma

Common Names: Baja Recluse

Loxosceles Parrami

Common Names: African Recluse

Loxosceles Reclusa

Common Names: Brown Recluse, Fiddleback, Violin Spider

Loxosceles Rufescens

Common Names: Mediterranean Recluse

Loxosceles Russellii

Common Names: Russell's Recluse

Loxosceles Sabina

Common Names: Tucson Recluse

LOXOSCELES VENOM

Dose: .0005oz(17mg)

DC: 30

Onset: 1D4+4 Hours

Duration: 3D4-1 Days

Symptoms: Body Aches (Joints), Chills, Fever, Headache, Nausea/Vomiting, Severe Localized Pain(Bite), Sweating

Damage: Necrotic Ulcer 2D6+3, Shock

Save: Reduce Duration By 50%, Save Vs Shock

Recluse spiders are found primarily in the Midwest of the United States. These spiders normally spin small, irregular webs under bark, stones or other secluded areas, but have adapted quite well to indoor habitats. Earning the name, the recluse spider ceases all activity at first light. They are commonly found in the storage areas of residences, including areas such as attics, closets, bedrooms and other dark recesses. Not only will this spider hide in cracks and crevices of the home, they will often climb into clothing or shoes that someone has laid out to wear the following day. This spider frequently inhabits clothing, toys, books, boxes, furniture as well as transports, tool sheds, tree houses and little used or abandoned dog houses. People are most commonly bitten in bed, while changing clothes, or cleaning storage areas. Bites often occur when the spiders hide in towels or old clothes left in such areas.

Recluses are nocturnal and prefer foods such as silverfish, crickets, cockroaches and other soft bodied insects. Distinguishing characteristics are three pairs of eyes arranged in a semicircle on the forepart of the head and a "fiddle" is behind the eyes with the neck of the violin pointing towards the abdomen.

The female deposits eggs in white silken cases about .33" in diameter in sheltered, dark areas. Spiderlings emerge in 24 to 36 days and abandon the egg case. Development is slow, and seems to be influenced by weather conditions and food availability. They reach maturity in 10 to 12 months and can survive long periods of time without food or water. Immature spiderlings resemble adult recluse spiders but have lighter coloration.

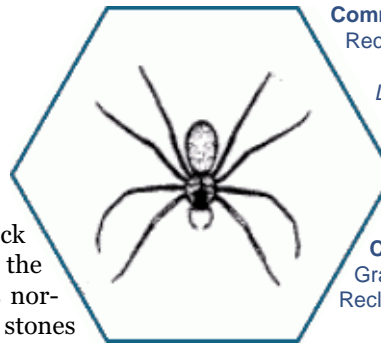
Their venom is especially poisonous to people and animals, those bitten often become ill and find that the wound does not heal quickly. Both male and female recluse spiders, as well as their spiderlings, are capable of injecting venom.

Loxosceles Amazonica

Common Names: Amazonian Recluse

Loxosceles Apachea

Common Names: Apache Brown Spider



Loxosceles Reclusa

Loxosceles Devia

Common Names: Texas Recluse

Loxosceles Gaucho

Common Names: Mexican Cowboy Recluse

Loxosceles Kaiba

Common Names: Grand Canyon Recluse

Loxosceles Intermedia

Common Names: Mexico

PHONEUTRIA VENOM

Dose: .0000021oz(.0059mg)

DC: 40

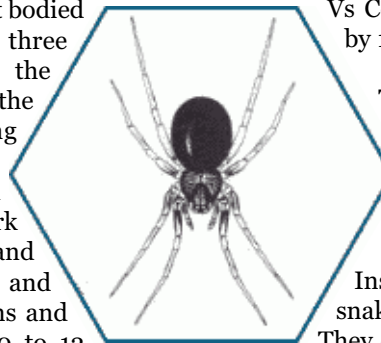
Onset: 1D4 Rounds

Duration: 1D6 Days

Symptoms: Blister (Bite), Headache, Labored Breathing, Nausea/Vomiting, Severe Localized Pain(Bite), Weakness

Damage: Asphyxiation 3D20 + 1D6 Per Round, Coma, Cardiac Failure 2D20+30, Shock

Save: Save Vs Asphyxiation (Reduces Damage by 100%), Save Vs Coma, Save Vs Cardiac Failure (Reduces Damage by 15%), Save Vs Shock(DC 10)



Phoneutria Nigriventer

This is a large hunting spider that produces the most toxic spider venom in the world, and is not afraid to use it. Though often confused as tarantulas, due to size and appearance, they are in actuality true spiders.

The Wandering Spider does not spin a web. Instead it wanders the forest floor, hunting mice, snakes, lizards and other spiders in the forest litter. They can also be commonly encountered hunting prey in Brazilian homes, hiding in shoes, hats, and other clothes. When disturbed, they will raise their front legs to expose threatening jaws. This spider also has the largest venom glands of any other, up to .4" long.

The Brazilian Wandering Spider has another well known common name, Banana Spider. The spider was given the name Banana Spider because there have been many cases where these spiders unintentionally hitched a ride on the banana boats heading for the United States and other countries. Though they can only survive a short time in cool weather, They thrive in the temperatures of the Southern United States and Mexico.

CHAPTER 2 - ARACHNID VENOMS

Today bananas go through a very rigorous cleaning cycle. First the bunches are washed in large tanks, submerged in water for ten minutes or more, sprayed with fungicide, then hand inspected and crated. If any wandering spiders or tarantulas make it through the inspections, they are usually found by fruit wholesalers before they arrive at the supermarket. Usually.

Phoneutria Fera

Common Names: Brazilian Huntsman, Brazilian Wandering Spider

Phoneutria Nigriventer

Common Names: Banana Spider, Colombian Wandering Spider

SELENOCOSMIA VENOM

Dose: .2oz(5.67G)

DC: 16

Onset: 1D2 Hours

Duration: 3D4 Hours

Symptoms: Headache, Nausea/Vomiting, Severe Localized Pain(Bite), Weakness

Damage: Shock

Save: Save Vs Shock

This hand-sized spider has the ability to make an audible whistle or hiss when aggravated. The hiss can easily be heard up to 6' away. That hiss, or whistle, is what gives it the common name of "Whistling Spider". They are also sometimes named "Barking Spiders", but whistling is a more accurate description of the sound.

Instead of spinning a web, this large spider digs a burrow. At the end of the 3' long burrow the soil is moist and cool, often littered with webbing, bones and insect parts. The entrance is covered by a silken cap, made with snail shells and other hard pieces, to keep the burrow humid and fire-proof. A low silk-covered mound around the entrance traps dew and raindrops for drinking and helps prevent flooding of the burrow. If the burrow does flood, air is trapped by the spider's hairy body, sustaining the spider until the water soaks away.

The whistling spider ambushes large insects, small mammals, reptiles, frogs, and even small birds near its burrow entrance at night and drags them inside to feed.

Mature males move around at night during or after rains or in highly humid weather to avoid dehydration when searching for the burrow of a female. After mating, the female suspends a large egg sack near the moist bottom of the burrow. As many as 12 months may pass after mating before the eggs are laid and the 4D12 young spiders emerge. The young disperse during or after rains to begin digging their own burrow in the damp soil.

Selenocosmia Crassipes

Common Names: Gray Barking Spider, Gray Whistling Spider

Selenocosmia Strenua

Common Names: Whistling Bird Spider

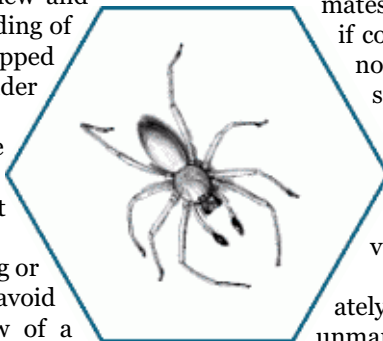
Selenocosmia Stirlingi

Common Names: Australian Common Whistling Spider, Barking Mouser

Selenocosmia Subvulpina

Common Names: Hairy Whistler, Whistling Tarantula

A farmer once reported that one of his caged turkey chicks was missing. While attempting to repair the breach in the cage, he saw a long groove in the dirt leading away from the cage. After following the groove a few feet, he found the chick, and it appeared to be stuck to the ground. After a closer examination, he found a large Whistling Spider stripping the skin off the bird as it tried to pull the chick down its burrow! One was even seen dragging a 2.5 pound dead fish carcass up from the river bank and across the forest to its burrow.



Tegenaria Agrestis

TEGENARIA AGRESTIS

(RENAISSANCE EUROPE: ARANEA AGRESTIS)

Common Names: Aggressive House Spider, Hobo Spider, Field Spider, Wheat Spider

Dose: Male .0006oz(17mg) / Female .0002oz(7.6mg)

DC: 30

Onset: 12D4 Hours

Duration: 2D4 Days

Symptoms: Body Aches (Joints), Dizziness, Headache, Nausea/Vomiting, Sweating, Weakness

Damage: Bone Marrow Failure 4D10 Per Hour (Continuing), Necrotic Ulcer 2D6+3

Save: Reduce Duration By 50%, Save Vs Bone Marrow Failure (DC 11)

The Hobo Spider is indigenous to western Europe that was introduced into the northwestern United States sometime before the 1930's. The means of introduction into the United States was almost certainly commercial shipping vessels carrying cargo originating from agricultural areas of Europe. They were most likely transported as egg cases attached to wooden crates or barrels.

In Europe the hobo spider is a resident of fields, rarely entering human habitations due to the presence competing spider. Human contacts with the hobo spider are uncommon in Europe. In the United States however, the hobo spider rapidly adapted to living in urban areas, and without the widespread presence of a dominant competitor, began to extend its range.

The hobo spider is a species with a capability of extending into new territories and adapting to many habitats. While it probably cannot adapt to extremely dry habitats, it adapts well to situations with adequate moisture and relatively cool climates. This is a non-aggressive spider, but will attack if cornered or pressed. Hobo spider poisoning does not invariably develop following a bite by a hobo spider. A large percentage of defensive bites by the hobo are dry, and no venom is injected when the spider bites. On a natural attack roll of 1 to 15, the bite is without venom. On a natural attack roll of 16 to 20, the full effect of the venom will be felt.

Physically, the adult hobo spider is a moderately large, .5" to .7" long brown spider, with long, unmarked legs. A typical specimen would fit on a silver dollar or a poker chip. The male has two pedipalps between the two front legs, which are swollen at the ends, that look somewhat like a pair of boxing gloves

The eggs of the Hobo Spider are deposited in 1 to 4 egg cases in late fall. These egg cases are composed of several layers of silk, intermingled with layers of dirt and debris. The egg cases are usually attached under rocks, wood, or other undisturbed items found in yards, gardens and vacant lots. Each egg case may contain 100 or more eggs.

Despite their increase, public awareness of these spiders has been low, because the Brown Recluse Spider has been blamed for the bites that people receive from Hobo Spiders.

CHAPTER 3 - TOXIC CHEMICALS

AMMONIA

Common Name(s): Alkaline Air, Spirit Of Hartshorn, Volatile Alkali

Dosage: 2oz(56.5g)

DC: 17

Onset: 2D6 Minutes

Duration: 1D4 Days

Symptoms: Blurred Vision, Cough, Dizziness, Fainting, Incoordination, Intense Thirst, Nausea/Vomiting, Severe Pain (Abdomen, Chest, Mouth, Throat), Wheezing

Damage: Burns (Skin) 2D6+10, Burns (Eyes, Blindness), Unconsciousness(Inhaled)

Save: Reduce Duration By 75%

Ammonia is a colorless gas that is about one half as dense as air at ordinary temperatures and pressures. It has a characteristic pungent, penetrating odor. Ammonia is found in minute proportion of the atmospheric and volcanic gases and is also a product of decomposition of animal and vegetable matter. Ammonia is an essential ingredient in the manufacture of fertilizers, explosives, and any number of chemicals and cleaning products. Ammonia is also widely used as refrigerant in many industrial facilities. Eyes contaminated with Ammonia liquid or vapor will become permanently blinded unless washed with 5 Gallons (20 Liters) of clean water for 15 Rounds within 5 Minutes of being exposed. Combining the common cleaning agents chlorine bleach and ammonia can liberate chlorine gas.

ARSENIC TRIOXIDE

Common Name(s): Arsenic

Dosage: .0035oz(5mg)

DC: 35

Onset: 1D4 Hours

Duration: 5D4 Hours

Symptoms: Diarrhea, Fainting, Hair Loss, Headache, Incoordination, Itchiness, Nausea/Vomiting, Pain (Abdominal), Weakness

Damage: Brain Damage, Dehydration, Mild Cardiac Failure 3D20+10, Stroke, Unconsciousness, Vessel Damage

Save: Save Vs Brain Damage, Save Vs Mild Cardiac Failure (Reduce Damage By 40%), Save Vs Stroke

Arsenic is a naturally occurring element widely distributed in the earth's crust. Natural Arsenic is combined with oxygen, chlorine, and sulfur to form inorganic Arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic Arsenic compounds. Arsenic has been used since 3000 BC, and has long been known to be acutely toxic. Inorganic Arsenic compounds are mainly used to preserve wood and in early mining techniques, while organic Arsenic compounds are used as pesticides. It was once taken as an ingredient in a medicine called Fowler's Solution during the late 18th/early 19th century. Arsenic poisoning is difficult to diagnose without sophisticated equipment as most of the Arsenic leaves the body within three days of exposure.

BARIUM CARBONATE

Common Name(s): Barium Carbonate, Barium Salt, Carbonic Acid, Rat Poison, Witherite

Dosage: .03oz(800mg)

DC: 22

Onset: 2D6 Minutes

Duration: 1D2 Hours

Symptoms: Convulsions/Seizures, Nausea/Vomiting, Severe Pain (Abdominal), Severe Diarrhea

Damage: Cardiac Failure 6D10+5 3D4 Per Hour, Paralyzation

Save: Reduce Damage By 50%

Barium Carbonate is soft, white, odorless and tasteless, usually found in nature as Witherite Ore. Barium carbonate is used in glass making, as a pottery glaze, roofing tiles, and as rat poison. Barium Carbonate is chemically similar to harmless Barium Sulfate. There are many instances where Barium Carbonate has contaminated products made with Barium Sulfate, such as table-salt, reused flour sacks, paper and photographic paper.

BENZENE

Common Name(s): Benzene

Dosage: .0004oz(12mg)

DC: 20

Onset: 1D2 Days

Duration: 1D6 Days

Symptoms: Confusion, Dizziness, Drowsiness, Headache, Weakness

Damage: Mild Cardiac Failure 3D20+10, Unconsciousness

Save: Save Vs Mild Cardiac Failure(Reduce Damage By 70%)

Benzene is a colorless liquid with a sweet odor. It evaporates into the air very quickly and dissolves slightly in water. It is highly flammable and is formed from both natural processes and manufacture. Some industries use benzene to make other chemicals which are used to make plastics, resins, and nylon and synthetic fibers. Benzene is also used to make some types of rubbers, lubricants, dyes, detergents, drugs, and pesticides. Natural sources of benzene include volcanoes and forest fires.

CARBON OXYCHLORIDE

Common Name(s): Carbonic Dichloride, Carbonyl Dichloride, Chloroformyl Chloride, CG, D-Staff, Green Cross, Phosgene

Dosage: .002oz(64mg)

DC: 17

Onset: 1D8 Rounds

Duration: 2D4 Hours

Symptoms: Cough, Headache, Nausea/Vomiting, Weakness, Wheezing

Damage: Mild Asphyxiation 2D10 +2D4 Per Minute

Save: Reduce Duration By 75%

Phosgene is a colorless gas with the odor of cut grass or green corn. Phosgene was first synthesized in 1812 by Sir Humphrey Davy. During World War I, it was used in combination with chlorine gas by the German army. The German army switched to Mustard Gas in 1917 because of the development of effective gas masks against Phosgene. More effective poisons and improved personal protective equipment make Phosgene an unlikely agent to be used in future battles.

CHAPTER 3 - TOXIC CHEMICALS

Phosgene is sometimes a byproduct of manufacturing aniline dyes, polycarbonate resins, coal tar, pesticides, isocyanates, polyurethane, and pharmaceuticals. Phosgene also occurs in uranium enrichment processes and bleaching sand for glass production.

CARBON TETRACHLORIDE

Common Name(s): Benzinoform, Freon 10, Halon 104, Tetraform, Tetrasol

Dosage: .0002oz(7mg)

DC: 25

Onset: 2D6 Minutes

Duration: 1D3 Days

Symptoms: Confusion, Dizziness, Drowsiness, Headache, Intoxication, Nausea/Vomiting, Weakness

Damage: Brain Damage, Coma, Kidney Damage, Liver Damage

Save: Save Vs Brain Damage, Save Vs Coma, Save Vs Liver Damage

Freon is a clear liquid with a sweet smell that is manufactured and does not occur naturally. Freon is most often found as a colorless gas. It's not flammable and doesn't dissolve in water very easily. It was once used in the production of refrigeration fluid and propellants for aerosol cans, as a pesticide, as a cleaning fluid and degreasing agent, in fire extinguishers, and in spot removers. These uses have been banned since the early 1990's and it is now only used in some industrial applications.

DICHLORODIPHENYLTRICHLOROETHANE

Common Name(s): DDT

Dosage: .002oz(64mg)

DC: 25

Onset: 1D4 Rounds

Duration: Permanent

Symptoms: (Effects Only Creature Type: VERMIN) Convulsions/Seizures, Dizziness, Weakness

Damage: (Effects Only Creature Type: VERMIN) Extreme Nerve Damage, Paralyzation, Unconsciousness

Save: Save Vs Paralyzation, Save Vs Unconsciousness

DDT was first synthesized in 1874, for no purpose other than to exist, by the German Chemist Othmar Zeidler. In 1939, Dr. Paul Müller independently reproduced DDT in his lab, and after various experiments to determine its possible uses, found that DDT quickly killed flies, aphids, mosquitoes, walking sticks and potato beetles. It was quickly patented in Switzerland in 1940, England in 1942 and the U.S. in 1943. In 1942 it was proven to kill body lice without any adverse effect on humans, and so it was used by every Allied trooper during World War II. DDT has been banned world-wide since 1972, but is still available in some third-world countries.

A Word About DDT: I was fully prepared to include DDT as a horrible and deadly modern chemical poison for readers to terrorize PCs and NPCs alike. While doing research for this book however, it became clear that DDT is not the world destroying poison that I had assumed it was. It is however (GMs take note) an excellent example of the rampant hidden-in-plain-sight-conspiracies that are ever-so common throughout mankind's history, complete with convenient theologies, manipulated semi-science, political manoeuvring and a

modern myth/public hysteria disguised as conventional wisdom that persists even to this day. I simply could not ignore the irony, so in the interest of better gaming, (AKA; arguing all night with your friends) and instead of a deadly poison, I present a feasible explanation for the ban of DDT to stimulate your think-box. If you feel safer in a crowd and still insist that DDT is a deadly scourge, it's your game, go right ahead.

-Mad Kaiser

There is no vaccine against malaria. It mutates readily, making it hard for a vaccine to be effective. The disease is treatable in most cases, but easily develops a resistance to drugs. The result is that in Sub-Sahara Africa alone the disease eliminates 70% more life than all cancers in all the developed countries combined.

DDT had proven itself invaluable by preventing an estimated 500 million deaths due to malaria. In 1946 Sri Lanka had three million cases, but DDT reduced the numbers to only 29 by 1964! In India, the numbers of malaria cases fell from 75 million to roughly 50,000. Was the prospect of more people surviving malaria worldwide intolerable to the population-control and zero-growth organizations? There is some reason to believe so. In the 1960s, World Health Organization authorities believed there was no alternative to the overpopulation problem but to assure that up to 40% of the children in poor nations would die of malaria. The average Agency for International Development ideals stated, "Rather dead than alive and riotously reproducing." and "I'd rather die of malaria than starvation." Accordingly, population-control adherents set out to have DDT banned in the name of "saving the environment". Rachel Carson provided the doctrine for this nature-cult of Environmentalism by presenting the science of DDT erroneously in her 1962 book "Silent Spring". She predicted that mankind would destroy the Earth, through the use of pesticides like DDT, which would essentially poison the food chain. At its heart, the now thoroughly discredited book was religious, rather than scientific, full of untested theories and infamously flawed and purposely tampered experiments. "Scientists" purposely fed birds and other animals nutrient-deficient diets to produce their desired results. The book served its purpose and the public hysterically demanded the government save them from this chemical plague. The new Environment-Bible of the hour was championed by several Environmentalism groups, who soon found their coffers and poor-boxes full of donated and redirected tax money.

Encouraged by the new influence of the now financially important Environmentalism groups, extensive hearings on DDT before an EPA administrative judge occurred during 1971 and 1972. The EPA hearing examiner, Judge Edmund Sweeney, concluded that "DDT is not a carcinogenic hazard, DDT is not a mutagenic or teratogenic hazard, and does not have a deleterious effect on freshwater fish, estuarine organisms, wild birds or other wildlife." In 1956 men who voluntarily ingested .001oz(35mg) of DDT (half the amount required to treat a single home for six months) daily for nearly two years were carefully examined up until the hearing and had developed no adverse effects. The application of DDT involves only a tiny, contained, environmentally tolerable, fraction of a dose. This is why some international health agencies, including UNICEF, support the judicious use of DTT. EPA administrator Ruckelshaus, a member of the Environmental Defense Fund,

CHAPTER 3 - TOXIC CHEMICALS

banned DDT in 1972 anyway. Science, it would seem, gets in the way of social activists, politicians, lawyers, and government in general. Ruckelshaus never attended a single hearing of the seven months of EPA hearings, nor did he read the transcript of the EPA hearings, nor did he examine any of the research results supplied for the hearings.

Within the decade, all developed countries, and some developing countries, banned DDT to the detriment of their health. In Sri Lanka, cases of malaria soon rose to 500,000 per year. Malaria has since returned with a vengeance, accounting for 300 million cases and one million deaths a year, mainly children.

DIMETHYL BENZENE

Common Name(s): Xylene, Xylol

Dosage: 1.8oz(50.8g)

DC: 19

Onset: 2D10 Minutes

Duration: 6D4 Hours (Alcohol Consumption Increases Duration By 25%)

Symptoms: Pain (Abdominal), Confusion, Dizziness, Headache, Incoordination

Damage: Mild Kidney Damage, Mild Liver Damage, Unconsciousness

Save: Save Vs Mild Kidney Damage, Save Vs Mild Liver Damage (Reduce Damage By 50%), Save Vs Unconsciousness

Xylene is a colorless, sweet-smelling liquid that burns easily. Xylene occurs naturally in petroleum and coal tar. It is used as a solvent in the printing, rubber, and leather industries. It is also used as a cleaner, paint thinner, and as a component of paints and varnishes. Xylene is one of the top 30 most abundant chemicals produced in the United States by volume.

DIMETHYL KETONE

Common Name(s): Acetone, Beta-Ketopropane

Dosage: 1.7oz(48g)

DC: 20

Onset: 3D4 Hours

Duration: 1D6 Days

Symptoms: Blurred Vision, Dizziness, Fainting, Incoordination, Intense Thirst, Nausea/Vomiting

Damage: Coma

Save: Save Vs Coma

Acetone is a naturally occurring and manufactured chemical. It is a colorless liquid with a distinct smell and taste. It evaporates easily, is flammable, and dissolves in water. Acetone is used primarily as a solvent, commonly found in factories used to make plastic, artificial fibers, drugs, and other chemicals. It occurs naturally in plants, trees, volcanic gases, forest fires, and as a product of the breakdown of body fat. It is also present in vehicle exhaust, tobacco smoke, and landfill sites. Acetone can be absorbed through the lungs, digestive tract, and the skin.

DIMETHYLPHOSPHORAMIDO-CYANIDATE

Common Name(s): Nerve Agent GA, Tabun

Dosage: .3oz(8g)

DC: 35

Onset: Instant

Duration: 2D30 Hours

Symptoms: Blurred Vision, Confusion, Convulsions/Seizures, Cramps, Labored Breathing, Drooling, Drowsiness, Headache, Nausea/Vomiting, Sweating

Damage: Asphyxiation 3D20+10 +2D6 Per Round, Extreme Brain Damage, Extreme Nerve Damage

Save: Save Vs Asphyxiation (Reduce damage By 40%), Save Vs Extreme Brain Damage (Reduce damage By 50%), Save Vs Extreme Nerve Damage (Reduce damage By 50%)

Tabun is a clear colorless and tasteless liquid with a slightly fruity odor. Tabun is a G-Class (German) nerve agent and was the first nerve agent to be discovered. In 1936 German scientist Dr. Gerhard Schrader first developed Tabun as an insecticide, where he first noticed the effects of nerve agents on humans when he and his lab assistant began to experience shortness of breath and contraction of the pupils while working with the substance. A factory for Tabun production was built and a total of 11,800 tons of Tabun were produced from 1942 to 1945. At the end of the World War II the Allies seized large quantities of Tabun and other nerve agents for study and disposal. The word "Tabun" has no particular meaning and is rumored to have been made up to hide the discovery.

ETHYLENE GLYCOL/PROPYLENE GLYCOL

Common Name(s): Antifreeze, Brake Fluid, De-Icer

Dosage: 8oz(226.8g)

DC: 18

Onset: 1D12 Hours

Duration: 1D3 Days

Symptoms: Blurred Vision, Dizziness, Fainting, Headache, Incoordination, Nausea/Vomiting, Difficulty Speaking

Damage: Brain Damage, Cardiac Failure 6D10+5 3D4 Per Hour, Kidney Damage, Kidney Failure 3D20+10 +3D6 Per Hour, Unconsciousness

Save: Save Vs Brain Damage, Save Vs Cardiac Failure, Save Vs Kidney Damage, Save Vs Kidney Failure

Ethylene Glycol and Propylene Glycol are used to manufacture antifreeze and de-icing solutions for cars, airplanes, and boats, polyester compounds and are used as solvents in plastic industries. Ethylene glycol is also an ingredient in photographic developing solutions, hydraulic brake fluids and inks used in stamp pads, ballpoint pens, and print shops. Both are clear, colorless, slightly syrupy liquids at room temperature. Either compound can exist in vapor form, but Propylene Glycol must be heated or briskly shaken to produce a vapor. Ethylene Glycol is odorless and has a sweet taste. Propylene Glycol is practically odorless and tasteless.

ETHYLENE MONOCHLORIDE

Common Name(s): Chloroethene, Ethylene Monochloride, Monochloroethene, Monochloroethylene, VC, VCM, Vinyl Chloride, Vinyl Chloride Monomer

Dosage: 2.8oz(80g)

DC: 17

Onset: 1D6 Minutes

Duration: 1D4 Hours

Symptoms: Dizziness, Drowsiness

CHAPTER 3 - TOXIC CHEMICALS

Damage: Asphyxiation 3D20+10 +2D6 Per Round, Liver Damage, Unconsciousness(Inhaled)

Save: Save Vs Asphyxiation(Reduce Damage By 50%), Save Vs Liver Damage(Reduce Damage By 50%)

Vinyl chloride is a colorless gas with a mild, sweet odor. It is a manufactured substance that is used to make polyvinyl chloride (PVC) for a variety of plastic products, including pipes, wire coatings, and upholstery. Burning these products will release dangerous amounts of Vinyl Chloride.

FORMALDEHYDE

Common Name(s): Formaldehyde

Dosage: .14oz(4g)

DC: 20

Onset: 1D10 Hours

Duration: 1D3 Days

Symptoms: Cough, Dizziness, Headache, Nausea/Vomiting, Nosebleed, Rash, Severe Pain

Damage: Coma

Save: Save Vs Coma

Formaldehyde is well known as a preservative in medical laboratories, as an embalming fluid, and as a sterilizer. Its primary use is in the production of resins. Resins are used in foam insulations, as adhesives in the production of particle board and plywood, and in the treating of textiles.

FUEL OIL

Common Name(s): Diesel, Gasoline, Kerosene, Lighter Fluid, Petrol, Range Oil

Dosage: 8oz(226.8g)

DC: 18

Onset: 1D10 Hours

Duration: 1D3 Days

Symptoms: Convulsions/Seizures, Cough, Cramps, Dizziness, Drowsiness, Headache, Nausea/Vomiting, Rash, Severe Pain

Damage: Coma, Liver Damage, Liver Failure 5D20+15, Unconsciousness

Save: Save Vs Coma, Save Vs Liver Failure

Fuel oil is a yellowish to light brown liquid mixture that is refined from crude petroleum. Some chemicals found in fuel oil may evaporate easily, while others may more easily dissolve in water. Fuel oils may be found in engines, lamps/lanterns, heaters, furnaces, and stoves, or as solvents. Typically, a Fuel oil can contain more than 150 chemicals, including small amounts of benzene, toluene, and sometimes lead.

HEXANE

Common Name(s): n-Hexane

Dosage: 25oz(708.75g)

DC: 25

Onset: 6D4 Hours

Duration: 1D6+6 Months

Symptoms: Numbness(Feet, Hands), Weakness

Damage: Paralyzation(Arms, Legs)

Save: Reduce Duration By 50%

Hexane is a chemical refined from crude petroleum. Pure Hexane is a colorless liquid with a slightly harsh odor. It is highly flammable, and the vapors can be explosive. The major use for solvents containing Hexane is to extract vegetable oils from soybeans, and cleaning agents in the printing, textile, furniture, and shoemaking industries. Several quick-drying glues and rubber cements also contain Hexane.

HYDROCYANIC ACID

Common Name(s): Blue Acid, Cyanide, Cyclone B, KCN, HCN, Prussic Acid, Zyklon-B

Dosage: .56oz (16g)

DC: 20

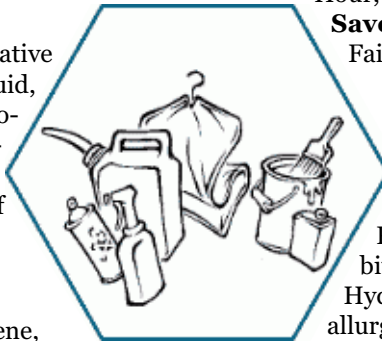
Onset: 1D4 Rounds

Duration: 1D4+2 Hours

Symptoms: Convulsions/Seizures, Deafness, Dizziness, Headache, Weakness

Damage: Brain Damage, Cardiac Failure 3D30+20 +3d6 Per Hour, Unconsciousness

Save: Save Vs Brain Damage, Save Vs Cardiac Failure, Save Vs Unconsciousness



Cyanide is usually found joined with other chemicals to form compounds. Hydrogen Cyanide is a colorless gas with a faint, bitter, almond-like odor. Sodium Cyanide and Potassium Cyanide are both white solids with a bitter, almond-like odor in damp air. Cyanide and Hydrogen Cyanide are used in electroplating, metallurgy, production of chemicals, photographic development, plastics, fumigating and mining. An Organic Cyanide is also produced as a defence by certain bacteria, fungi, and algae, and a number of plants.

Zyklon-B was a German trade name of a pest and vermin poison that was used as a fumigant prior to World War I by the United States. Two German firms, Tesch/Stabenow and Degesch, acquired the patent to provide Germany with a powerful delousing poison. Hydrocyanic Acid was allowed to soak into wood pulp or clay pellets with an irritant added to warn bystanders of its presence. These pellets were then sealed in an airtight can to make handling and transportation safer. Zyklon-B is still used today for the fumigation of furniture, barracks, silos, ships, and the destruction of animal burrows.

HYDROGEN PEROXIDE

Common Name(s): Peroxide, Peroxide Bleach

Dosage: 3oz(85g)

DC: 14

Onset: 1D4 Hours

Duration: 1D6 Hours

Symptoms: Nausea/Vomiting

Damage: Embolism 3D30+20

Save: Save Vs Embolism

Hydrogen Peroxide is a colorless liquid with a bitter taste. Hydrogen Peroxide is unstable, decomposing readily to oxygen and water with release of heat. Although nonflammable, it is a powerful oxidizing agent that causes spontaneous combustion

CHAPTER 3 - TOXIC CHEMICALS

when it comes in contact with organic material making it suitable for medicinal applications and as a clothes and hair bleach. In industry, a highly concentrated Hydrogen Peroxide is used to bleach textiles and paper, as a component of rocket fuel, and foam rubber production.

ISOPHORONE

Common Name(s): Isophthalic Acid

Dosage: 2.8oz(80g)

DC: 19

Onset: 1D4 Hours

Duration: 2D8 Hours

Symptoms: Dizziness, Fatigue

Damage: Coma

Save: Save Vs Coma(Reduce Duration By 75%)

Isophorone is a clear liquid that smells like peppermint that dissolves in water. It is an industrial chemical used as a solvent in some printing inks, paints, lacquers, and adhesives. Isophorone is a primarily industrial chemical, but it is also found occurring naturally in cranberries in microscopic amounts.

MALATHION

Common Name(s): Malathion Concentrate, Malathion

Spray

Dosage: 8oz(226.8g)

DC: 22

Onset: 3D6 Hours

Duration: 2D4 Days

Symptoms: Blurred Vision, Cramps, Diarrhea, Dizziness, Labored Breathing, Headache, Nausea/Vomiting, Sweating

Damage: Unconsciousness, Asphyxiation 3D20+10 +2D6 Per Round

Save: Save Vs Asphyxiation(Reduces Damage By 50%)

Malathion is a pesticide used on agricultural crops, golf courses, and home gardens. It is used primarily to kill mosquitos and fruit flies in large outdoor areas. Additionally, Malathion is used to kill fleas on pets and to treat head lice. Usually, it is sprayed on crops or sprayed from an airplane over wide land areas, especially in the states of California and Florida. Malathion comes in two forms, a pure colorless liquid and a technical-grade brownish-yellow liquid, which contains Malathion and impurities in a solvent. Technical grade Malathion smells like garlic.

METHYL ISOCYANATE

Common Name(s): Isocyanic Acid

Dosage: 8oz(226.8g)

DC: 15

Onset: 8D4 Hours

Duration: Permanent

Symptoms: Cough, Labored Breathing

Damage: Severe Lung Damage

Save: Save Vs Severe Lung Damage (Reduce Damage By 50%)

Methyl Isocyanate is a colorless liquid that evaporates quickly and is highly flammable. It has a sharp, strong chemical odor. Methyl Isocyanate is used in the production of pesticides,

polyurethane foam, and plastics.

METHYL TRICHLORIDE

Common Name(s): Chloroform

Dosage: .017oz(500mg)

DC: 30

Onset: 1D4 Rounds

Duration: 1D4 Hours

Symptoms: Dizziness, Drowsiness, Headache

Damage: Unconsciousness

Save: Save Vs Unconsciousness

Chloroform is a colorless liquid with a pleasant, non-irritating odor and a slightly sweet taste. In the past, Chloroform was used as an inhaled anesthetic before surgery, but it is used now to make chemical propellants and plastics. It can also be produced in small amounts when chlorine is added to water. The first recorded use of inhalation anesthesia occurred in 1865 at the hands of Dr. George Post, an American missionary surgeon. In order to demonstrate digestion organs, Dr. Post administered Chloroform to a dog before surgery. He also pioneered new standards of patient safety and procedure for surgery, the dangers of a full stomach, and cardiac and respiratory arrest. Because of its dangerous nature, Chloroform use was discontinued in favor of Ether in 1899.

METHYLPHOSPHONOFUORIDATE-PINACOLYL

Common Name(s): Nerve Agent GD, Soman, Trilon

Dosage: .0001oz(5mg)

DC: 35

Onset: Instant

Duration: 2D30 Hours

Symptoms: Blurred Vision, Confusion, Convulsions/Seizures, Cramps, Labored Breathing, Drooling, Drowsiness, Headache, Nausea/Vomiting, Sweating

Damage: Asphyxiation 3D20+10 +2D6 Per Round, Extreme Brain Damage, Extreme Nerve Damage

Save: Save Vs Asphyxiation (Reduce damage By 40%), Save Vs Extreme Brain Damage (Reduce damage By 25%), Save Vs Extreme Nerve Damage (Reduce damage By 25%)

Soman is the weaker twin of the nerve agent Sarin, though with impurities, it gives a weak odor of camphor, nutmeg, or orange peel. Soman was discovered in 1944 and was the third and last of the original G-Class nerve gases developed by Dr. Gerhard Schrader and his assistants. Soman was found to be exceptionally hard to manufacture and was never mass produced. Only a small amount was found in a laboratory when the war came to an end.

METHYLPHOSPHONOTHIOATE-DIISOPROPYL

Common Name(s): Nerve Agent VX, Nerve Agent VX²

Dosage: .0003oz(10mg)

DC: 43

Onset: 1D4 Minutes

Duration: 2D10 Hours

Symptoms: Blurred Vision, Confusion, Convulsions/Seizures, Cramps, Labored Breathing, Drooling, Drowsiness, Headache, Nausea/Vomiting, Sweating

Damage: Asphyxiation 3D20+10 +2D6 Per Round, Extreme

CHAPTER 3 - TOXIC CHEMICALS

Brain Damage, Extreme Nerve Damage

Save: Reduce Duration By 25%

VX is a odorless, tasteless and oily liquid that can be clear or amber colored, similar to motor oil. VX is normally found in this liquid state despite the nerve gas name. It has a low volatility and is an excellent adhesive. A special form has been developed that is so adhesive that it is virtually impossible to remove from the surface that it is in contact with.

VX was discovered by British scientists in 1952. The British traded the discovery with the U.S. Army in 1953 for information on thermonuclear weapons and a systematic investigation of these new compounds was begun at the Edgewood Chemical Biological Center. In 1955, the compounds were designated V-Class (Venomous).

Because VX is a weapon of mass destruction that spreads from an impact point killing all in its path with brutal efficiency, there would be a high possibility of a nuclear counterattack if used in great quantities.

METHYLFLUOROPHOSPHONATE-ISOPROPYL

Common Name(s): Nerve Agent GB, Sarin, Zarin

Dosage: .00001oz(.5mg)

DC: 35

Onset: Instant

Duration: 2D30 Hours

Symptoms: Blurred Vision, Confusion, Convulsions/Seizures, Cramps, Labored Breathing, Drooling, Drowsiness, Headache, Nausea/Vomiting, Sweating

Damage: Asphyxiation 3D20+10 +2D6 Per Round, Extreme Brain Damage, Extreme Nerve Damage

Save: Save Vs Asphyxiation (Reduce damage By 40%), Save Vs Extreme Brain Damage (Reduce damage By 10%), Save Vs Extreme Nerve Damage (Reduce damage By 10%)

Sarin vapor is colorless, odorless, tasteless and diffuses very rapidly into the human skin. It is slightly heavier than air, so it tends to drift above the ground for weeks if not months, depending on how much is used. Under wet and humid weather conditions sarin degrades swiftly, but as the temperature rises up to a certain point, sarin's lethal duration increases, despite the humidity. Sarin gas was on full-scale production in early 1940 and up to 10 tons of the gas was produced by the end of WWII. Sarin got it's name from the German scientists Schrader, Ambros, Rudrigger and Van Linde.

Sarin was released in commuter trains on three different Tokyo subway lines by the Aum Shinrikyo cult in 1995. Sarin was concealed in lunch boxes and soft-drink containers and placed on subway train floors. It was released as terrorists punctured the containers with umbrellas before leaving the trains. The incident was timed to coincide with rush hour, when trains were packed with commuters. Over 5,500 people were injured in the attack.

MUSTARD GAS

Common Name(s): Distilled Mustard, Kampfstoff "Lost", Mustard HD, Mustard Vapor, Mustard Sulfur, S Mustard, S-Lost, S-Yperite, Schwefel-Lost, Sulfur Mustard, Sulfur Mustard Gas, Sulphur Mustard, Sulphur Mustard Gas, Yellow Cross Liquid, Yperite

Dosage: .2oz(5.7g)

DC: 21

Onset: 1D12 Hours

Duration: 4D4 Days

Symptoms: Cough, Nausea/Vomiting, Rash, Severe Itching, Swelling (Eyelids, Skin), Yellow Blisters, Weakness

Damage: Blindness, Mild Asphyxiation 2D10 +2D4 Per Minute, Severe Lung Damage

Save: Save Vs Mild Asphyxiation, Reduce Duration By 25%

Mustard Gas is not really a gas, but a liquid comprised of several manufactured chemicals that is not likely to change into a gas immediately if released at room temperature. As a pure liquid, it is colorless and odorless, but when mixed it becomes brown and has a garlic, horseradish or apple-like smell. It generally requires an explosion, such as an artillery shell, or another powerful force, to vaporise the liquid into its deadly gaseous form.

Mustard Gas was first used by the German Army in 1917. The most employed of all the chemical weapons used during the war by either side, Yperite was so powerful that only small amounts had to be added to high explosive shells to be effective. Once in the soil, mustard gas remains active for several weeks, especially in cold weather and forms stiff floating clumps in water that can remain deadly for years. Mustard Gas is still used by some Third-World Dictators, Warlords and Terrorists, especially in the Middle-East.

NAPHTHALENE

Common Name(s): Carbaryl, Naphtha, Tar Camphor, White Tar

Dosage: .85oz(24g)

DC: 12

Onset: 2D8 Rounds

Duration: 1D10 Hours

Symptoms: Diarrhea, Fatigue, Jaundice, Nausea/Vomiting

Damage: None

Save: Reduce Duration By 50%

Naphthalene is a white solid with a strong smell. Naphthalene is a natural component of fossil fuels such as petroleum and coal used in the manufacture of resins, dyes, pharmaceuticals, and insect repellents. Other items made from Naphthalene are moth balls and crystals, urinal cakes and diaper pail deodorant blocks. Naphthalene is also used in leather tanning chemicals.

NITROBENZENE

Common Name(s): 4-NBP, 4-Nitrobiphenyl, Oil Of Mirbane

Dosage: .7oz(21g)

DC: 16

Onset: 3D4 Minutes

Duration: 2D10+4 Hours

Symptoms: Dizziness, Drowsiness, Headache, Nausea/Vomiting, Weakness

Damage: Liver Damage, Unconsciousness

Save: Reduce Duration By 35%

Nitrobenzene is an oily yellow liquid with an almond-like

CHAPTER 3 - TOXIC CHEMICALS

odor. It is produced in large quantities for use in manufacture of a chemical called aniline, a parent substance for many dyes and drugs, pesticides, and synthetic rubber. Nitrobenzene is also used to produce lubricating oils used in motors and machinery.

PENTACHLOROPHENOL

Common Name(s): PCP

Dosage: .56oz(16g)

DC: 16

Onset: 1D4 Hours

Duration: 2D6 Hours

Symptoms: Confusion, Severe Fever, Dizziness, Headaches, Sweating

Damage (Double Damage To Creature Subtype:

AQUATIC): Brain Damage, Kidney Damage, Liver Damage, Lung Damage, Nerve Damage

Save: Save Vs Brain Damage(Reduce Damage By 50%), Save Vs Kidney Damage(Reduce Damage By 50%), Save Vs Liver Damage (Reduce Damage By 50%), Save Vs Lung Damage (Reduce Damage By 50%), Save Vs Nerve Damage (Reduce Damage By 50%)

Pure pentachlorophenol exists as an odorless white powder or colorless crystals. Impure pentachlorophenol is found as dark gray or brown dust, beads, or flakes. Pentachlorophenol was widely used as a pesticide and wood preservative for utility poles, railroad ties, and docks up until 1984, when the purchase and use of pentachlorophenol became restricted to certified licence holders only and no longer available to the general public. It is still used industrially as a wood preservative.

SODIUM HYDROXIDE

Common Name(s): Lye, Oven Cleaner

Dosage: .7oz(20g)

DC: 13

Onset: 20D6 Minutes

Duration: 8D6 Hours

Symptoms: Blurred Vision, Nausea/Vomiting, Severe Pain(Abdomen, Ears, Eyes, Nose, Throat), Swelling(Throat)

Damage: Mild Liver Damage

Save: (Reduce Duration By 25%)

Sodium Hydroxide is a white, odorless, crystal powder used to manufacture dyes, explosives, paper, petroleum products, rayon, and soaps. It is also used in processing cotton, laundry bleaching, metal cleaning, and electroplating. It is also commonly present in commercial drain and oven cleaners.

SODIUM HYPOCHLORITE

Common Name(s): Bleach, Chlorine Bleach, Pool Tablets

Dosage: .00088oz(.025g)

DC: 16

Onset: 1D2 Days

Duration: 1D6 Days

Symptoms: Cough, Irritation (Eyes, Skin), Wheezing

Damage: Asphyxiation 3D20+10 +2D6 Per Round, Lung Damage

Save: Save Vs Asphyxiation (Reduce Damage By 70%), Save Vs

Lung Damage

Chlorine is a yellow-green gas at room temperature, that is heavier than air and has a strong irritating odor. Exposure to Chlorine Gas is rare, the most common exposures occur with products made from Chlorine. Sodium Hypochlorite is used as a disinfectant in public drinking water and swimming pools and as common household bleach. If these are swallowed, Chlorine Gas is produced in the stomach and causes serious corrosive injury.

The first chemical agent to be used was about one hundred sixty tons of chlorine gas, which was released from 6,000 pressurized cylinders by the Germans against the Allies on April 22, 1915, near the Belgian village of Ypres. The chlorine floated in huge clouds on the wind until it reached the Allied lines. Over 5,000 allied troops died in the attack and in a second attack two days later, another 5,00 soldiers died. Both attacks wounded about 15,000 men.

TERPENE

Common Name(s): Eucalyptus Oil, Pine Oil, Turpentine

Dosage:2.8oz (80g)

DC: 15

Onset: Instant

Duration: 8D6 Hours

Symptoms: Pain (Abdominal), Blurred Vision, Headache, Sore Throat, Nausea/Vomiting

Damage: Mild Asphyxiation 2D10 +2D4 Per Minute

Save: Reduce Duration By 35%

Terpene is highly concentrated distillation of the fluids of certain plants and is a flammable, colorless liquid with a characteristic strong odor. Commercial Turpentine is produced from pine wood and needle distillation and is used to manufacture perfume, solvents, glues and most household detergents. Pine oil and Turpentine are also reliable natural repellents for insect vermin.

TETRACHLOROETHYLENE

Common Name(s): PCE, Perc, Perchloroethylene

Dosage: .00028oz(8.16mg)

DC: 16

Onset: 1D10 Rounds

Duration: 10D10 Hours

Symptoms: Confusion, Convulsions/Seizures, Cramps, Dizziness, Drowsiness, Hallucinations, Headache, Nausea/Vomiting

Damage: Asphyxiation 3D20+10 +2D6 Per Round, Cardiac Failure 6D10+5 3D4 Per Hour, Coma, Liver Damage, Severe Kidney Damage

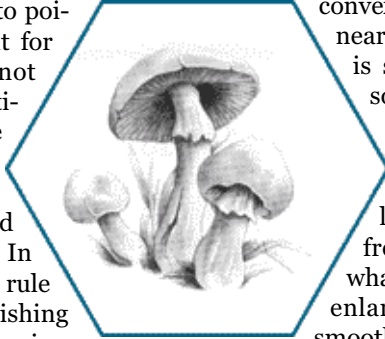
Save: Save Vs Asphyxiation(Reduce Damage By 75%), Save Vs Cardiac Failure, Save Vs Coma, Save Vs Liver Damage, Save Vs Severe Kidney Damage(Reduce Damage By 50%)

Tetrachloroethylene is a sweet smelling solvent used in commercial and industrial dry cleaning. Since being introduced to the drycleaning industry in the late 1930s, it has replaced most Solvents due to its nonflammability. Its other major uses are as a metal cleaning and degreasing solvent and manufacture of HFC 134a, an alternative to CFC refrigerants.

CHAPTER 4 - FUNGAL POISONS

POISONOUS MUSHROOMS

Mushroom poisoning is caused chiefly by the consumption of raw or cooked mushrooms and toadstools. The term toadstool comes from the German word Todesstuhl, which translates as death's stool. Toadstool is a name commonly given to poisonous mushrooms, but for individuals who do not possess the proper identification skills, there are generally no easily recognizable differences between poisonous and nonpoisonous species. In fact, there is no general rule of thumb for distinguishing edible mushrooms and poisonous toadstools. Any skilled or unskilled attempts at gathering mushrooms should be made secretly by the Dungeon Master.



Agaricus Xanthodermus

AGARICUS

The caps of this mushroom range in size from 1" to 5". The color is whitish with a smooth and glossy to fibrous surface. The gills are free from the stem, having a deep pink color that becomes brown and then dark chocolate brown in maturity. These gills are covered with a thin white partial veil when in the button stage. Stems are 1" to 2.5" long and .5" thick, sometimes tapering slightly to the base. The taste and smell are appealing.

This genus also includes some very good edibles. Those without the proper Knowledge skill have a DC20 when trying to gather edible Agaricus, otherwise they will pick a toxic variety when foraging.

Agaricus Albolutescens

Common Name(s): Meadow Toadstool
Poison: Paresthesine

Agaricus Placomyces

Common Name(s): Black Scale Toadstool
Poison: Paresthesine

Agaricus Silvicola

Common Name(s): White Peck
Poison: Paresthesine

Agaricus Xanthodermus

Common Name(s): Yellow Stainer
Poison: Paresthesine

AMANITA

These beautiful, stark-white mushrooms are among the deadliest mushrooms in the world, containing enough poison to kill a healthy adult with just one bite. All of these mushrooms have a cap 2" to 5" wide oval becoming convex, then broadly convex to nearly plane in age. The flesh is smooth, dry, stark white, sometimes coloring to yellow or to bright red with age. Gills are white and close. Stems are 3" to 8" long and .5" to 1" thick, frequently tapering somewhat to apex and flaring to an enlarged base. Bases are smooth or finely hairy, white, with a persistent skirt like ring that almost always remains. The smell is most distinctive in older specimens, being like strong bleach.

Amanita Bisporigera

Common Name(s): Death Angel
Poison: Amanitin

Amanita Brunnescens

Common Name(s): Cleft-Foot Amanita
Poison: Paresthesine

Amanita Chlorinosma

Common Name(s): Toad Bleach, Chlorine Amanita
Poison: Paresthesine

Amanita Cothurnata

Common Name(s): Booted Amanita
Poison: Muscimol

Amanita Flaviconia

Common Name(s): Yellow Patches, Yellow Wart
Poison: Paresthesine

Amanita Flavorubescens

Common Name(s): Yellow Blusher
Poison: Paresthesine

Amanita Frostiana

Common Name(s): Frost's Amanita
Poison: Paresthesine

Amanita Gemmata

Common Name(s): Gemmed Amanita, Jeweled Deathcap
Poison: Muscimol

Amanita Muscaria

Common Name(s): Fly Agaric
Poison: Muscimol

Amanita Ocreata

Common Name(s): Destroying Angel
Poison: Amanitin

Amanita Pantherina

Common Name(s): Panther
Poison: Muscimol

Amanita Parcivolvata

Common Name(s): False Fly Agaric
Poison: Paresthesine

Amanita Phalloides

Common Name(s): Death Cap
Poison: Amanitin

Amanita Smithiana

Common Name(s): Smith's Amanita
Poison: Orellanine

Amanita Vaginata

Common Name(s): True Grisette
Poison: Amanitin

Amanita Verna

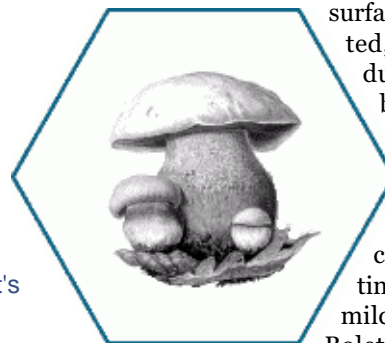
Common Name(s): Spring Destroying Angel
Poison: Amanitin

Amanita Virosa

Common Name(s): Spring Amanita
Poison: Amanitin

BOLETUS

These red-pored mushrooms are recognized by large size and club-shaped stem with coarse, reddish scales. Caps range from 3" to 7" wide and are broadly convex, almost spherical. The surface is dry, uneven or pitted, color ranging from dull-brown to cream-brown, the pigments often mottled, frequently tinged reddish towards the edge. Most turn blue when cut. The odor is not distinctive and they have a mild taste. The spores of Boletus are brown to dull olive-brown.



Boletus Satanus

Some members of the genus Boletus are among the best edible mushrooms. To have much success with identification, you will need working familiarity

CHAPTER 4 - FUNGAL POISONS

with this genus. The mushrooms in *Boletus* often change their appearance rather drastically as they develop. Those without the proper Knowledge skill have a DC30 when trying to gather edible *Boletus*, otherwise they will pick a toxic variety when foraging.

Boletus Frostii

Common Name(s): Frost's Bolete

Poison: Paresthesine

Boletus Pulcherrimus

Common Name(s): Beautiful Bolete

Poison: Paresthesine

Boletus Satanus

Common Name(s): Satan's Bolete

Poison: Paresthesine

Boletus Sensibilis

Common Name(s): Delicate Boletus, Splatty Boletus

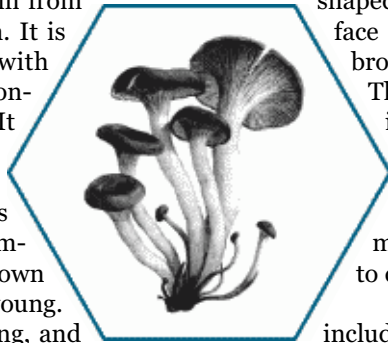
Poison: Paresthesine

CHLOROPHYLLUM MOLYBDITES

Common Name(s): Green Gill, Green Spored Lepiota, Green-Spored Parasol

Poison: Paresthesine

The cap is 2" to 7" broad paraboloid, keeping a shaggy margin from veil fragments in youth. It is brown, sometimes with white tints, with occasional expansion cracking. It will sporadically turn carrot-orange when injured. The gills are free and close, cream-colored in age, buff-brown to grayish-olive when young. The stem is 2" to 4" long, and .5" to 1" thick, slightly enlarged to bulbous at the base and white, bruising dull vinaceous-brown, then gray-brown in older material. The spores are a distinctive green color.



Clitocybe Clavipes

Chlorophyllum Molybdites is a toxic look-alike of *Macrolepiota Rachodes*, a good edible species. The differences between these two species can be subtle, particularly when young. Those without the proper Knowledge skill have a DC26 when trying to gather the edible *Macrolepiota Rachodes*, otherwise they will pick a toxic *Chlorophyllum Molybdites* when foraging.

CLITOCYBE

The caps of the *Clitocybe* range from 2" to 10" wide and convex with an incurved margin. They have a color ranging from grayish to light brownish gray. The surface almost always moist, and the flesh is thick, white. The stems are also white, sizes range from 2" to 10" long and 1" thick. The spores are yellow and plentiful. All have an unpleasant odor, either rancid or skunky.

Clitocybe Clavipes

Common Name(s): Clubfoot Funnelcap, Fat-Footed Clitocybe

Poison: Coprine

Clitocybe Dealbata

Common Name(s): Sweater Cap

Poison: Muscarine

Clitocybe Rivulosa

Common Name(s): Miller's Cap

Poison: Muscarine

Clitocybe Truncicola

Common Name(s): No Name

Poison: Muscarine

CONOCYBE

Characterized by a obtusely-conic cap, almost a sharp funnel shape or bell-shaped, .3" to 1" across. The surface is smooth, at first light-brown, fading to dull brown. The stalks are tiny and fragile, often quite long in proportion to width. Gills are usually rusty brown to cinnamon brown at maturity. Spores are brown to cinnamon brown.

This genus also includes some very good edibles. Those without the proper Knowledge skill have a DC18 when trying to gather edible *Conocybe*, otherwise they will pick a toxic variety when foraging.

Conocybe Cyanopus

Common Name(s): Blue Conocybe

Poison: Psilocybin

Conocybe Filaris

Common Name(s): Cotton Conocybe

Poison: Amanitin

Conocybe Smithii

Common Name(s): Smith's Conocybe

Poison: Psilocybin

COPRINUS

Caps range from 1" to 6" wide and are oval when young, expanding to broadly convex or bell-shapes, sometimes with a curled up and/or tattered margin. The flesh is yellow brown, amber, or sometimes paler and becoming paler with age towards the margin. Gills are attached to the stem and pale, becoming brown, then black. These black gills will liquify, turning to black "ink". Stems are 1" to 3" long but never more than .2" thick. They are white, fibrous, and hollow. Spores are smooth and black.

Coprinus Atramentarius

Common Name(s): Inky Cap

Poison: Coprine

Coprinus Fuscescens

Common Name(s): Dark Cap

Poison: Coprine

Coprinus Insignis

Common Name(s): Reagle Ink

Poison: Coprine

Coprinus Micaceus

Common Name(s): Mica Cap

Poison: Coprine

Cortinarius Orellanus

Common Name(s): Poznan Cort

Poison: Coprine

ENTOLOMA

Caps are 2" to 6" wide, being slightly convex and lumpy. Skin color ranges from dark bluish-gray to light gray. Gills are notched, white to pale blue in color, becoming pinkish as spores mature. Stems range from 2" to 4" long, .5" to 1" thick, and are usually streaked bluish-gray above, and pallid to whitish below. Spores are always salmon-pink.

Very few members of the genus *Entoloma* are edible mushrooms. To have much success with identification, you will need working familiarity with this genus. Those without the proper Knowledge skill have a DC30 when trying to gather edible *Entoloma*, otherwise they will pick a toxic variety when foraging. Even those with the requisite skills have a -5 when identifying.

Entoloma Mammosum

Common Name(s): Pink Nipple

Entoloma Nidorosum

CHAPTER 4 - FUNGAL POISONS

Common Name(s): Pink Gills

Poison: Paresthesine

Entoloma Pascuum

Common Name(s): Passover Entoloma

Poison: Paresthesine

Entoloma Rhodopolium

Common Name(s): Rhode Entoloma

Poison: Paresthesine

Entoloma Salmoneum

Common Name(s): Salmon Cap

Poison: Paresthesine

Entoloma Strictius

Common Name(s): Erect Entoloma

Poison: Paresthesine

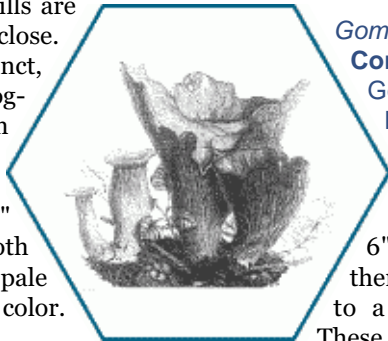
Entoloma Vernum

Common Name(s): Spring Entoloma

Poison: Paresthesine

GALERINA

Galerina caps are 1" to 2" wide, and slightly convex. Their flesh is usually moist, yellow-brown to cream, with a strait margin. Gills are tan to rust-brown and close. The gills are very distinct, making it easier to recognize this species from below than from above. Stalks range from 3" to 4" tall and .2" to .5" wide, have smooth skin and range from pale brown to dark brown in color. Spores are rust-brown.



Gomphus Bonari

Galerina Autumnalis

Common Name(s): Deadly Galerina

Poison: Amanitin

Galerina Marginata

Common Name(s): Margined Galerina

Poison: Amanitin

Galerina Venenata

Common Name(s): Brownie Cap

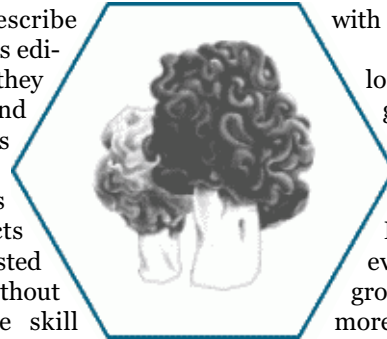
Poison: Amanitin

GOMPHUS

Caps are cylindrical and vase-shaped, up to 5" wide with a margin plane to strongly uplifted. The skin is moist, nearly smooth when young, and coarsely scaly at maturity, especially at the center. Color ranges from yellowish-orange to reddish-orange fading in age.

The stem is up to 5" tall, .5" to 1" thick, stout, tapering downward, and hollow near the base, sometimes discoloring brown.

Though a few describe members of this genus as edible and even choice, they have a mealy flavor and are usually regarded as mediocre by most mushroom hunters. This species also attracts insects and is often infested with fly larva. Those without the proper Knowledge skill have a DC30 when trying to gather edible Entoloma, otherwise they will pick a toxic variety or an insect infested mushroom when foraging.



Gyromitra California

Gomphus Bonari

Common Name(s): Short & Woolly

Poison: Paresthesine

Gomphus Floccosus

Common Name(s): Woolly Chanterelle

Poison: Paresthesine

Gomphus Kauffmanii

Common Name(s): Woolly

Gomphus

Poison: Paresthesine

GYMNOPIUS

Caps range from 2" to 6" across, with a convex then expanded shape similar to a large furniture button. These mushrooms have a rich golden color and are usually covered in small fibrous scales. The meat is pale yellowish and taste very bitter. Stems are 2" to 5" long and up to 1" thick, usually swollen in the lower part but narrowed again at base. Spores are rusty-orange.

Gymnopilus Aeruginosus

Common Name(s): Golden Saucer

Poison: Psilocybin

Gymnopilus Validipes

Common Name(s): Tree Rotter

Poison: Psilocybin

GYROMITRA

Caps range from 1" to 4.5" wide and are very misshapen, looking like a large wrinkled prune. Color ranges from tan to yellow brown, and rarely with red

shades. The under-sides are paler, ingrowing with stem where contact occurs. The stem is 1" to 4" long, pale tan to white and as thick as the cap, with ribs or waves.

Gyromitra are toxic look-alikes of the Morchella genus, best known as morels. Morels are among the most popular edible mushrooms. False morels grow almost everywhere that morels grow. This makes hunting for morels in the spring a risky enterprise, despite the fact that so many people feel confident.

Those without the proper Knowledge skill have a DC30 when trying to gather the edible Morchella, otherwise they will pick a toxic Gyromitra when foraging. Even those with the requisite skills have a -10 when identifying.

Gyromitra Ambigua

Common Name(s): Devil's Morel, Bull Nose

Poison: Gyromitrin

Gyromitra Brunnea

Common Name(s): Brown False Morel

Poison: Gyromitrin

Gyromitra Californica

Common Name(s): Red False Morel

Poison: Gyromitrin

Gyromitra Caroliniana

Common Name(s): Brown Bonnet

Poison: Gyromitrin

Gyromitra Esculenta

Common Name(s): Beefsteak Morel

Poison: Gyromitrin

Gyromitra Fastigiata

Common Name(s): Elephant Ear

Poison: Gyromitrin

Gyromitra Gigas

Common Name(s): Snow Mushroom, Snow-Bank Morel

Poison: Gyromitrin

Gyromitra Infula

Common Name(s): Walnut Morel

Poison: Gyromitrin

HEBELOMA

Caps range from 3" to 5" wide, con-

CHAPTER 4 - FUNGAL POISONS

vex at first with an inrolled margin. Surfaces are smooth, moist, cream to brown shading to a light-brown. Flesh is thick and white with the odor of radish and a bitter taste. Gills are also white becoming pale brown, with finely serrated edges and droplets of liquid when young. Stem ranges from 1.5" to 3" long, enlarged at the base and covered with fine powdery granules.

Hebeloma Crustuliniforme
Common Name(s): Poison Pie
Poison: Paresthesine

Hebeloma Fastibile
Common Name(s): Sham Mushroom
Poison: Paresthesine

Hebeloma Sinapizans
Common Name(s): Mexico Cap
Poison: Paresthesine

INOCYBE

Caps are 1" to 2" wide, with a cone shape becoming convex at the margin. In old age, the cap opens like an umbrella to become nearly plane, the margin tending to split in dry weather. The color is white to pallid, often spotted brown in age. The stem 1" to 3" tall, tapering downward, sometimes with a small bulb. The surface is moist, forming a temporary hairy texture that soon disappears in age. Spores are oblong and brown.

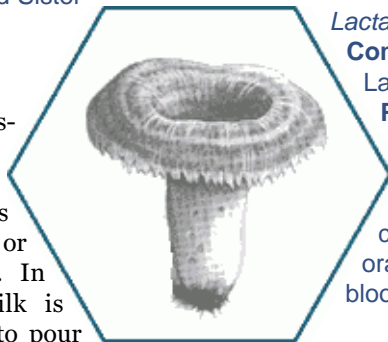
Inocybe Geophylla
Common Name(s): White Devil
Poison: Muscarine

Inocybe Lilacina
Common Name(s): Lavender Cap
Poison: Muscarine

Inocybe Sororia
Common Name(s): Bad Sister
Poison: Muscarine

LACTARIUS

Instead of being classified by a particular look or growing pattern, mushrooms in this genus exude a "latex," or "milk", when injured. In some species, the milk is copious, and it seems to pour out of the mushroom when sliced or the gills are damaged. In older specimens, the milk can be scarce, especially



Lactarius Chrysotheus

those that have grown in dry weather.

Some milky caps are relatively easy to identify, while others can frustrate even educated and experienced "Lactariologists". Those without the proper Knowledge skill have a DC30 when trying to gather the edible Lactarius, otherwise they will pick a toxic Lactarius when foraging. Even those with the requisite skills have a -15 when identifying.

Lactarius Chrysotheus
Common Name(s): Candy Cap
Poison: Paresthesine

Characterized by a rusty brown, usually dimpled or depressed cap, pinkish gills that bleed watery latex, and a smooth, brittle stem colored like the cap. Fresh specimens have a faint, sweet odor, but when dried smell strongly of butterscotch.

Lactarius Glaucescens
Common Name(s): Red Cap, Fire Cap
Poison: Paresthesine

Characterized by a red cap with a finely thin margin which soon fades to gray-brown, flesh-pink gills, and a stem with matted, white bulb at the base.

Lactarius Helvus
Common Name(s): Hell Cap
Poison: Paresthesine

Characterized by its large size, deep purple color, and shorter spines on the spores. The color of this mushroom, except the gills, fades fast as it loses moisture. Unless found when very fresh, often the only purple seen is in the gills.

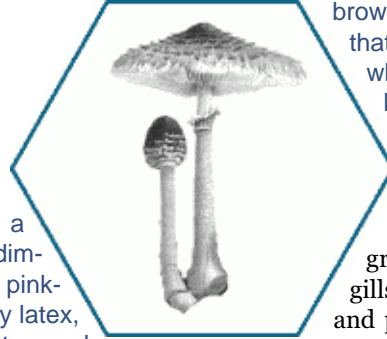
Lactarius Representateus
Common Name(s): Bloody Lactarius
Poison: Paresthesine

Characterized by orange to orange red caps and green discolorations in age and a thick blood-like dark reddish latex.

Lactarius Rufus
Common Name(s): Birch-Ghost
Poison: Paresthesine

Characterized by a pale white cap, white unchanging latex, and a hairy stem. It often fruits with other birch-loving species.

Lactarius Scrobiculatus
Common Name(s): Birch Cap
Poison: Paresthesine



Lepiota Cristata

Characterized by a dull tan-brown to medium-brown cap that normally does not blue when cut, or if so, only faintly. It often fruits with other birch-loving species.

LEPIOTA

Mushrooms in this group have white spores, gills that are white to yellow, and partial veils that typically leave a ring on the stem. Caps are 4" to 12" wide conical when young, becoming convex to broadly convex in age, have a dry texture and are often scaly but do not have patches or warts. These caps are often have spots of intense color, usually near the center. Stems range 2" to 10" long, and sometimes slightly enlarged toward the base. The textures are smooth, firm, white, sometimes discoloring slightly brownish, with a double-edged ring.

There are some edible mushrooms in the genus, but they should be avoided by the unskilled hunter due to the possibility of confusion with Amanita species. Those without the proper Knowledge skill have a DC25 when trying to gather an edible Lepiota, otherwise they will pick a toxic Lepiota or Amanita when foraging.

Lepiota Clypeolaria
Common Name(s): Golden Shield
Poison: Paresthesine

Lepiota Cristata
Common Name(s): Fried Egg
Poison: Paresthesine

Lepiota Lutea
Common Name(s): Yellow Lepiota
Poison: Amanitin

LYCOPERDON

The body of a typical Lycoperdon is a 1" to 4" sphere, with a large hollow gaseous chamber at maturity for spore dispersal. Colored white to pallid to pale

CHAPTER 4 - FUNGAL POISONS

brown, the surface is composed of conical spines, surrounded by a circular row of warts. These spines are white to pallid to pale brown, leaving dark brown scars as they fall off. The base is well developed, forming a pseudo stem. Spines and warts are absent on this stem or much less prominent.

Technically this fungus is not a mushroom, rather it is in a group of fungi called puffballs. The spores are formed inside an enclosed fruiting body, becoming dusty at maturity. When mature, the bulbous body breaks open allowing the spores to be blown away.

Lycoperdon Marginatum

Common Name(s): Butter Puffball
Poison: Paresthesine

Lycoperdon Subincarnatum

Common Name(s): Puffball
Poison: Paresthesine

NAEMATOLOMA FASCICULARE

Common Name(s): Sulphur Tuft
Poison: Paresthesine

Naematoloma Fasciculare is distinguished by its large stature, dry cap and cap shape. The cap is 3" to 6" wide, convex to broadly convex with an cracked and curved margin when young, sometimes with partial veil remnants. The cap is very variable in color, ranging from orange-brown to cinnamon brown, but sometimes paler toward the margin. The gills can be attached to the stem or pulling away from it, the color also ranges from pale to pale gray at first, becoming darker gray and eventually nearly purple-brown. The stem is 2" to 4" long, frequently tapering to base, smooth, and most often colored like the cap, or a bit more pale. It is extremely bitter.

PANAEOLUS

The caps of the *Panaeolus Naematoloma Fasciculare* are tiny, only .5" to 1" wide, very bell shaped and smooth, or cracked in dry weather. The skin is dark brown to cinnamon brown, changing to light brown, tan, or fleshy when in the process of drying out. Stems are 2" to 4" long, sometimes with an enlarged base, smooth, fragile, and pale. They are the most com-

mon and widely distributed grass mushrooms in the world, and often fruit in large numbers.

Panaeolus Castaneifolius

Common Name(s): Mower's Mushroom
Poison: Psilocybin

Panaeolus Cyanescens

Common Name(s): Brownie Button
Poison: Psilocybin

Panaeolus Fimicola

Common Name(s): Kidney Cap
Poison: Psilocybin

Panaeolus Foeniseii

Common Name(s): Haymaker's Mushroom
Poison: Psilocybin

Panaeolus Sphinctrinus

Common Name(s): Dead-Man Mushroom
Poison: Psilocybin

Panaeolus Subbalteatus

Common Name(s): Coffee Cap
Poison: Psilocybin

PAXILLUS INVOLUTUS

Common Name(s): Brown Roll-Rim
Poison: Paresthesine

Paxillus involutus is a large brown mushroom, ranging from 3" to 7" wide, recognized by a broadly depressed cap, inrolled cap margin from which the species name and common name is derived. The stem is stout and lumpy honeycomb gills with the tendency for all parts of the mushroom to bruise brown. The gills are also easily peeled from the cap and sometimes form rudimentary tubes.

PHOLIOTA

Pholiota caps are 1" to 4" wide and slightly convex with small brown scales over a pale fleshy to yellow layer. The margin is smooth, often with veil fragments that disappearing in age. Gills are close and thin, pallid at first, then dull brown at maturity. Stems range from 2" to 4" long, occasionally tapering downward. The skin is very dry, brown at base, pallid to pale pink above with brown scales.

Spores are brown to dark brown.

Pholiota Aurea

Common Name(s): Scaly *Pholiota*
Poison: Paresthesine

Pholiota Squarrosa

Common Name(s): Indian *Pholiota*
Poison: Paresthesine

POLYPORUS

The misshapen lumpy body of a *Polyporus* can range from 2" to 12" wide and up to 2" thick. The shape is generally like a hand fan, pale tan to creamy yellowish color, darkening in age, with an overlay of darker, brownish scales that are often radially arranged. The stem is typically substantial and tough and blackens as the mushroom matures. It is also covered with large, angular, and frequently irregular pores somewhat like cork. This cork-skin is tough, especially towards the stem.

Polyporus often grow near members the *Morchella* genus, best known as morels. Morels are among the most popular edible mushrooms. Even the non-toxic varieties of *Polyporus* are rather tough and chewy, and a strongly mealy smell correlates to a strongly mealy taste. It is not a highly sought variety, especially when a tasty morel is right at hand.

Polyporus Berkeleyi

Common Name(s): Bondazewia
Poison: Paresthesine

Polyporus Cristatus

Common Name(s): Mealy *Polyporus*
Poison: Paresthesine

Polyporus Giganteus

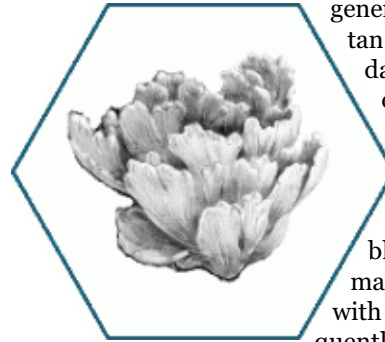
Common Name(s): Giant *Polyporus*
Poison: Paresthesine

Polyporus Schweinitzii

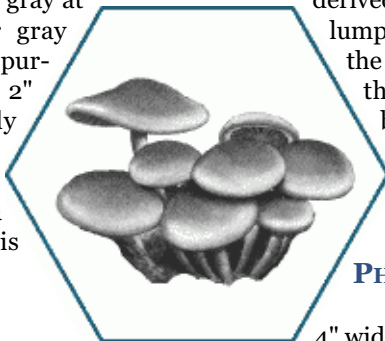
Common Name(s): Cedar Rot
Poison: Paresthesine

Polyporus Sulphureus

Common Name(s): Sulphur *Polyporus*
Poison: Paresthesine



Polyporus Sulphureus



Naematoloma Fasciculare

CHAPTER 4 - FUNGAL POISONS

PSILOCYBE

The cap is a conic bell shape, usually with a nipple or umbo at the top, ranging from .5" to 2" wide. The margins of the caps are often incurved when young. Some caps become convex and flat with age, while others become wavy. The caps are moist and the margin is translucent, making the lines of the gill plates visible on the caps when moist. Psilocybe species have a film or membrane which can easily be separated from the cap. The colors of the cap range from a dark olive brown or chestnut rusty color when fresh to pale yellow when dried. A slight bluing occurs along the outer edges of the caps when damaged. Stems are similarly colored, though can show some blue from stress, and range from .5" to 2.5" long. Spores are inky black.

These hallucinogenic mushroom use dates as far back as the earliest recorded history can relate. Ancient paintings of mushroom-headed humanoids, dating back to 5,000 B.C. have been found in caves on the Tassili plateau of Northern Algeria. Ancient Central and South American cultures built temples to mushroom gods and carved many statues classified as 'mushroom stones'. These stone carvings, in the shape of mushrooms, or in which figures are depicted under the cap of a mushroom, have been dated to as early as 1000-500 B.C. The purpose of the sculptures is not certain, but were most likely used as religious objects.

These mushrooms and their active ingredients are still used for recreation, therapeutically, and as a part of new spiritual traditions. They are also a controlled substance in 80% of the modern civilized societies!

Psilocybe Baeocystis

Common Name(s): Potent Psilocybe
Poison: Psilocybin

Psilocybe Caerulescens

Common Name(s): Myan Mushroom
Poison: Psilocybin

Psilocybe Caerulipes

Common Name(s): Blue-Foot
Poison: Psilocybin

Psilocybe Cyanescens

Common Name(s): Dung-Lover
Poison: Psilocybin

Psilocybe Cubensis

Common Name(s): Basic Psilocybe, King Psilocybe
Poison: Psilocybin

Psilocybe Pelliculosa

Common Name(s): Conifer Psilocybe
Poison: Psilocybin

Psilocybe Semilanceata

Common Name(s): Liberty Cap
Poison: Psilocybin

Psilocybe Strictipes

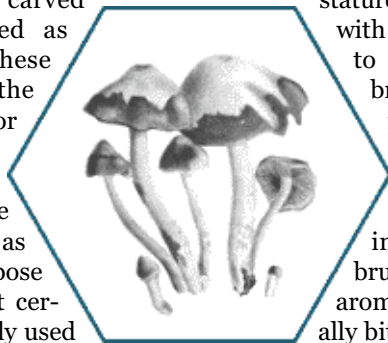
Common Name(s): No Name
Poison: Psilocybin

Psilocybe Stuntzii

Common Name(s): Stuntz's Blue Leg
Poison: Psilocybin

RAMARIA

Ramaria are not typical mushrooms. Ramaria is recognized by an upright stature, more or less parallel, with branching pattern similar to coral or sea-weed. The branches are typically pinkish-brown with slender pale-yellow tips. Stems range from .5" to 1" long, tough, and discoloring light-brown when bruised. The odor is slightly aromatic, but the taste is usually bitter.



Psilocybe caerulescens

This genus also includes some very good edibles. Those without the proper Knowledge skill have a DC20 when trying to gather edible Ramaria, otherwise they will pick a toxic variety when foraging.

Ramaria Formosa

Common Name(s): Handsome Ramaria
Poison: Paresthesine

Ramaria Gelatinosa

Common Name(s): Jelly Ramaria
Poison: Paresthesine

RUSSULA ROSACEA

Common Name(s): Rose Russula
Poison: Paresthesine

vex with a rounded and in-turned margin. The surface is smooth, with a dark rose red to bright red to rose pink color, fading to pink or rose pink, often with yellowish blotches in age. The flesh is brittle and tastes very acrid. The stem is 2" to 4.5" long, stuffed white and brittle. This is considered a very pretty mushroom and is often depicted in popular art.

SCLERODERMA

These mushrooms are physically similar to the Lycoperdon puffballs. They are oblong spheres, 2" to 4" wide by 1" to 3" inches high. The color ranges from brown to yellow brown and the skin is covered with small, dark brown, rough warts. The rind is thick, yellow brown, initially becoming marbled purple and finally purple brown to dark brown as the spores become mature.

Technically this fungus is not a mushroom, rather it is in a group of fungi called puffballs. The spores are formed inside a enclosed fruiting body, becoming dusty at maturity. When mature, the bulbous body breaks open allowing the spores to be blown away.

Scleroderma Aurantium

Common Name(s): Pigskin, Poison Puffball
Poison: Paresthesine

Scleroderma Cepa

Common Name(s): Earthball
Poison: Paresthesine

TRICHOLOMA

This group of mushrooms contains many diverse, and sometimes baffling, specimens. Tricholoma is more of a taxonomical convenience, a "catch-all", than a natural group, consisting of mushrooms that are brought together more on a set of negative characteristics than any one positive uniting factor. If a medium-sized white mushroom with white spores doesn't fall into another standard genus, it is placed in this one.

Tricholoma Album

Common Name(s): White Tricholoma
Poison: Paresthesine

Tricholoma Nudum

Common Name(s): Blewit
Poison: Paresthesine

The cap is 2" to 6" wide, highly con-

CHAPTER 4 - FUNGAL POISONS

Tricholoma Pardinum

Common Name(s): White Leopard

Poison: Paresthesine

Tricholoma Pessundatum

Common Name(s): Devil-Toe

Poison: Paresthesine

Tricholoma Saponaceum

Common Name(s): Syrup Bucket

Poison: Paresthesine

Tricholoma Sulphureum

Common Name(s): Sulphur Bucket

Poison: Paresthesine

VERPA BOHEMICA

Common Name(s): Early Morel

Poison: Paresthesine

Caps range from .5" to 1" wide and are very misshapen, looking like a small wrinkled prune. Color ranges from tan to yellow brown, and rarely with red shades. The undersides are more pale, ingrowing with the stem where contact occurs. The stem is .5" to 2" long, pale tan to white and as thick as the cap, with ribs or waves.

It appears very early in the spring, and continues fruiting during the true morel season. It bears a resemblance to *Morchella Semilibera*, the Half-Free Morel. But the Half-Free Morel is half free, while *Verpa bohemica* has a cap that hangs completely free of the stem, attached only at the top.

FUNGUS POISONS

Toxins are spread throughout the mushroom, so no matter which part is consumed the full effects will be felt. Mushrooms that cause human poisoning cannot be made nontoxic by cooking, freezing, or any other means of processing, and the material remains toxic for years, even decades. Because poisonous varieties can look very similar to edibles, it is a simple matter for an assassin to replace a few mushrooms in the pantry, drop a few mushrooms into a stew. In all cases .7oz(20G) of mushroom material is considered to have a minimum standard dose.

FOLK TALES

There are several convincing myths about the identification and handling of toxic mushroom varieties. The application of myth as fact is entirely up to the

GM's individual tastes.

If You Can Peel It...: If you can peel the skin from a mushroom's cap, you can eat it safely.

Silver Spoons & Onions: If a silver spoon or onion is placed in a mushroom broth, it will darken in the presence of a poisonous mushroom.

Blind Man's Puff: If you kick or smash a puffball and get the spores in your eyes, it will make you blind.

Yellow Salt: The liquids of a poisonous mushroom will make salt turn yellow.

AMANITIN

Dosage:.0005oz(16mg)

DC: 22

Onset: 4D6 Hours

Duration: Continuing

Symptoms: Cramps, Diarrhea,

Nausea/Vomiting

Damage: Severe Liver Damage, Kidney Failure 6D6+5, Liver Failure 5D20+15, 2D6 Per Minute

Save: Save Vs Liver Failure(Reduce Damage By 25%), Save Vs Kidney Failure(Reduce Damage By 25%)

COPRINE

Dosage:.0007oz(20mg)

DC: 16

Onset: 1D30+30 Minutes

Duration: 1D4+1 Hours

Symptoms: Anxiety, Pain (Chest), Red Skin, Nausea/Vomiting

Damage: Minor Liver Damage, 2D20

Save: Reduce Duration By 30%

Special: Only poisonous when consumed with alcohol.

GYROMITRIN

Dosage: .006oz(180mg)

DC: 15

Onset: 1D8 Turns

Duration: 2D6 Hours

Symptoms: Pain (Abdominal),

Convulsions/Seizures, Dizziness,

Fatigue, Severe Headache, Vertigo

Damage: Coma, 4D4 Per Hour

Save: Save Vs Coma

MUSCARINE

Dosage:.0022oz (63mg)

DC: 11

Onset: 1D2 Hours

Duration: 1D4+20 Hours

Symptoms: Excessive Drooling,

Sweating, Watery Eyes

Damage: Asphyxiation 3D20+10, 2D8

Per Hour

Save: Save Vs Asphyxiation

MUSCIMOL (IBOTENIC ACID)

Dosage: .02oz(600mg)

DC: 20

Onset: 1D Hours

Duration: 6D4 Hours

Symptoms: Agitation, Anxiety, Confusion, Convulsions/Seizures,

Dizziness, Drowsiness, Euphoria

Damage: None

Save: Reduces Duration By 50%

ORELLANINE/ORELLINE

Dosage: .1oz(3.2G)

DC: 14

Onset: 3D4 Days

Duration: 3D2 Days

Symptoms: Chills, Headache, Pain, Severe Thirst

Damage: Kidney Damage, Kidney Failure 6D6+5

Save: Save Vs Kidney Damage, Save Vs Kidney Failure(Increases Duration By 50%)

PSILOCYBIN

Dosage: 1.6oz(45.5g)

DC: 30

Onset: 1D30+30 Minutes

Duration: 1d4+3 Hours

Symptoms: Confusion, Hallucinations

Damage: None

Save: Reduce Duration by 40%

After the Psilocybin has run its duration, the user may suffer acute anxiety or depression for a variable period of time. Flashbacks have been reported days or even months after taking the last dose.

PARESTHESINE

Dosage: .03oz(900mg)

DC: 12

Onset: 1D2 Hours

Duration: 2D2 Hours

Symptoms: Diarrhea,Nausea/Vomiting

Damage: Slight Intstinal Damage 2D10 Per Hour

Save: Save Vs All Effects

Only Certain individuals are sensitive to this poison. If a saving throw is made, it is assumed that the target is immune to the effects of Paresthesine under normal healthy circumstances. If the saving throw is failed, the character will have a -5 on any future saves.

CHAPTER 5 - MARINE VENOMS

ACANTHASTER

Common Name(s): Crown-Of-Thorns

Dose: .012oz(360mg)

DC: 13

Onset: 2D6 Rounds

Duration: 3D8 Minutes

Symptoms: Cough, Headache, Itching, Minor Swelling (Wound), Nausea/Vomiting, Numbness, Severe Pain, Weakness

Damage: Paralyzation

Save: Save Vs Paralyzation

A Crown-Of-Thorns is a multi-colored starfish found worldwide that can grow up to 2' across. The "thorns" are actually long, sharp and poisonous spines that number in the thousands, growing to a length of 1.5" to 2". A thin layer of skin with venom glands envelopes the spines. They are bottom dwellers, so contact is most often accidental. Injury occurs from the spine and venom transferred into the wound from the spine. They do not have a set number of arms, so any starfish found can have from 5 to 25 (4D6+1) arms, each with dozens of spines.

They do not swim, except very weakly at the larval stage. Juvenile and adult Crown-Of-Thorns starfish do not walk on their arms, but on a large number of tiny tubes which extend from grooves underneath each arm. They prefer to live on coral in sheltered areas such as lagoons, and in deeper water along reef fronts, where there is less disturbance by currents, tides, weather etc. The Crown-Of-Thorns starfish feeds on coral polyps. It spreads it's stomach out through it's mouth over a lump of living coral, secreting digestive juices, killing the coral, then sucks up the resulting liquids remains. After feeding it moves on leaving a patch of white, or a coral skeleton. The Crown-Of-Thorns starfish usually feed twice a day for several hours Small and juvenile Crown-Of-Thorns starfish feed at night, so they can avoid predators which are more active during daylight.

Acanthaster Ellisi

Common Name(s): Crown-Of-Thorns, Step Mother's Pin-Cushion

Acanthaster Plancii

Common Name(s): Crown-Of-Thorns

ACANTHURUS

Common Name(s): Surgeonfish, Tang

Dose: .8oz(22.5G)

DC: 11

Onset: Instant

Duration: 1D6 Hours

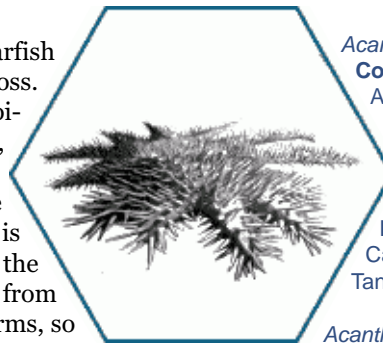
Symptoms: Nausea/Vomiting, Severe Localized Pain, Swelling (Limb)

Damage: Shock

Save: Save Vs Shock

The Surgeonfish is a brightly colored fish with a flat and wide oval shaped body averaging 9" to 1' in length. There are almost 75 species of this fish found among coral reefs in most

tropical seas. One of their most distinguishing characteristics is their ability to change their scale color according to mood and environment. The Surgeonfish is named for the scalpel sharp blades that are found on their bodies. The location of these differs with varied species. While the fish is calm the blade is tucked inside a groove on their body, but the moment they are threatened the blade comes out from the rear of the fish, point forward and ready to cut. When the Surgeonfish are threatened by other species they will swim beside the intruder swinging their tails to inflict cuts. When their aim is accurate the intruder will receive long, deeply slicing cuts.



Acanthaster Ellisi

Acanthurus Achilles

Common Name(s): Achilles Tang

Acanthurus Coeruleus

Common Name(s): Caribbean Blue Tang

Acanthurus Japonicus

Common Name(s): Whiteface Surgeonfish

Acanthurus Leucosternon

Common Name(s): Powder-Blue Tang

Acanthurus Lineatus

Common Name(s): Clown Surgeonfish

Acanthurus Olivaceus

Common Name(s): Orange-Epaulette Surgeonfish

Acanthurus Pyroferus

Common Name(s): Chocolate Tang

Acanthurus Sohal

Common Name(s): Red Sea Clown Tang

Acanthaster Ellisi

Common Name(s): Yellow-Eye Tang

Acanthurus Triostegus

Common Name(s): Convict Surgeonfish

Ctenochaetus Hawaiiensis

Common Name(s): Chevron Tang

Naso Hexacanthus

Common Name(s): Unicorn Tang

Naso Lituratus

Common Name(s): Lipstick Tang, Naso Tang

Naso Lopezi

Common Name(s): Elongate Surgeonfish

Naso Unicornis

Common Name(s): Unicorn Tang

Paracanthurus Hepatus

Common Name(s): Blue Tang

Zebrasoma Desjardini

Common Name(s): Desjardin's Sailfin Tang

Zebrasoma Flavescens

Common Name(s): Yellow Sailfin Tang

Zebrasoma Scopas

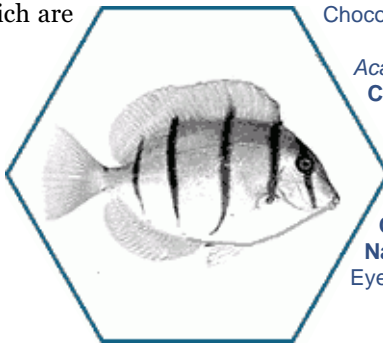
Common Name(s): Brown Sailfin Tang

Zebrasoma Veliferum

Common Name(s): Pacific Sailfin Tang

Zebrasoma Xanthurum

Common Name(s): Purple Tang



Acanthaster Ellisi

ARBACIIDAE

Common Name(s): Sea Urchin

Dose: .08oz(2.25G)

DC: 12

Onset: 2D6 Rounds

Duration: 2D6 Hours

Symptoms: Numbness, Severe Pain, Swelling (Face, Wound)

Damage: Paralyzation (Limb)

Save: Save Vs Paralyzation

CHAPTER 5 - MARINE VENOMS

The sea urchin gets its name from an Old English word for the spiny hedgehog, a land animal similar to the porcupine. Sea urchins live in the low-levels of tide pools, eating algae off hard surfaces and filtering other bits of food from the water. Most of the time this is seaweed, bits of plants and small animals, and occasionally barnacles or mussels. Sea urchins can move surprisingly fast on their tube feet and spines. The urchins stick to various surfaces with a system that creates suction in the end of the foot by ejecting the water out. The Sea Urchins mouth is on the underside of its body. This mouth, often called Aristotle's Lantern, is claw-like with 5 teeth-like plates. Urchins use these teeth to pull, tear and rip off algae from the rocks. These teeth continue to grow throughout the sea urchin's life. The spines also have the ability to transport food to the mouth, serving as both protection and as a feeding-filter for the urchin.

Sea urchin's range in size from about 1" to 4" and they come in many different colors, the most common being purple and pink. They live in sheltering holes that they wear into rocks. They have also been observed to make these depressions in solid steel.

There are two types of venom delivery systems used by Sea Urchin. Venom within the spines is released after the spine penetrates the skin. Penetration of the skin by the spines also results in the release of violet-colored fluid that stains the wound and is a good indicator of penetrating injury. In addition to the spines, there are also seizing organs on the surface of the sea urchin scattered among the spines called Pedicellariae. The Pedicellariae will continue to deliver venom into the skin, even if they are broken off of the body of the sea urchin.

Diadema Savignyi
Common Name(s): Black Longspine Urchin, Long-Spined Sea Urchin

Common Name(s): Globe Urchin, Sphere Urchin, Tuxedo Pincushion Urchin

Echinothrix Calamari
Common Name(s): Banded Longspine Urchin, Hatpin Urchin, Longspine Urchin

Spatangus Purpureus
Common Name(s): Purple Cardiac Sea Urchin

Echinometra Lucunter
Common Name(s): Black Boring Sea Urchin

Strongylocentrotus Droebachiensis
Common Name(s): Green Sea Urchin

Eucidaris Tribuloides
Common Name(s): Club Urchin, Mine Urchin, Pencil Urchin, Slate-Pencil Sea Urchin

Strongylocentrus Franciscanus
Common Name(s): Giant Red Sea Urchin

Lytechinus Vaniegatus
Common Name(s): Pincushion Urchin

Strongylocentrus Purpuratus
Common Name(s): Purple Sea Urchin

Lytechinus Variiegatus
Common Name(s): Green Pincushion Urchin

Tripeustes Gratilla
Common Name(s): Hairy Colored Pincushion Urchin, Priest-Hat

Mespilia Globulus

BALISTIDAE

Common Name(s): Triggerfish

Dose: .00015oz(4mg)

DC: 26

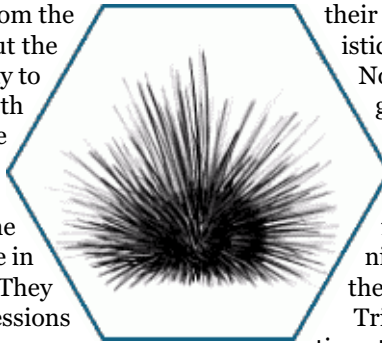
Onset: 1D8 Hours

Duration: 1D4+20 Hours

Symptoms: Convulsions/Seizures, Dizziness, Difficulty Speaking, Numbness, Sweating, Weakness

Damage: Asphyxiation 3D20+10, Cardiac Failure 5D20+20, Paralyzation

Save: Reduce Duration By 70%, Reduce Damage By 30%



Diadema Savignyi

These small relatives of the Pufferfish have acquired their Common Name Triggerfish from the characteristic locking and unlocking of their first dorsal fin. Normally the dorsal fin is positioned in a flat groove on the top of the body. It can however, be locked in the upright position in order to wedge the fish into some crevice in which it has taken refuge. This keeps the fish from being removed from the crevice and eaten. When they rest at night, they will find a safe spot in a nook, position themselves and lock in.

Triggers are relatively poor swimmers, most of the time they move by undulating wave motions of the dorsal and anal fins, only using the tail fin for emergencies. Triggerfish are normally solitary and territorial, but during breeding a mated pair makes a nest in pits dug in the sand.

Balistoides Conspicillum
Common Name(s): Clown Triggerfish

Odonus Niger
Common Name(s): Black Triggerfish

Balistes Vetula
Common Name(s): Queen Triggerfish

Odonus Purpureus
Common Name(s): Purple Triggerfish

CHIRONEX FLECKERI

Common Name(s): Box Jellyfish, Fire Jelly, Marine Stinger, Moreton Bay Stinger

Dose: .0026oz(70mg)

DC: 30 + 1 Per Tentacle

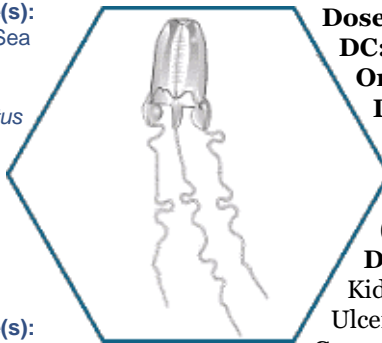
Onset: 10 + 2D10 Rounds

Duration: 2D2 Days

Symptoms: Convulsions/Seizures, Cramps, Headache, Minor Swelling (Wound), Nausea /Vomiting, Numbness, Severe Localized Pain (Back, Lungs, Wound), Weakness

Damage: Cardiac Failure 6D10+5 3D4 Per Hour, Kidney Failure 3D20+10 3D6 Per Hour, Necrotic Ulcer 1D4 Per Tentacle, Paralyzation, Shock

Save: Reduce Duration By 60%



Chironex Fleckeri

The Box Jellyfish is found in the coastal waters of northern Australia but not on the Great Barrier Reef. It is the most dangerous jellyfish, and one the deadliest venomous creatures, in the world. It is a large jellyfish, weighing up to 13 pounds and measuring about 7" to 11" across the dome while the tentacles can droop about 6' from the base. It is transparent in the water, and difficult to see, imposing a -10 to any attempts at detecting the creature.

This jellyfish has 4 bundles of 2D6+3 tentacles. Each tentacle contains millions of nematocysts which discharge venom

CHAPTER 5 - MARINE VENOMS

through skin on contact. Contact with a large amount of tentacle material over a wide surface area can result in multiple (+1D4) envenomation. The nematocysts are normally used by jellyfish to deliver the toxin into their prey. They feed on shrimp and often frequent the same beaches as humans. These animals have a strategy of passive hunting; they simply wait for the prey to bump into their tentacles. Since a struggling shrimp could easily tear the tentacles of a jellyfish, it has developed a very strong venom to kill prey instantly.

The Fire Medusa is a smaller relative of the Box Jellyfish. This jellyfish is the size of a large apple, and the number of tentacles on each of the four bundles seldom exceeds nine. The tentacles are also shorter and finer than those of the Box Jellyfish. Its venom is the same as Box Jelly venom, but the quantity of venom is much lower and the scarring is minimal.

This venom works quickly, but maximum dosing occurs only when still-active nematocysts are allowed to remain in the skin and continue injecting venom. Pulling on tentacles only aggravates them into injecting even more. If .5 gallon of household vinegar is applied over the effected skin within 10 rounds of envenomation, the continued discharge of venom will cease. If the victim can receive this treatment quick enough, they will suffer only the damage from Necrotic Ulcers, Shock, and Paralyzation (the normal symptoms) and gain +5 to Fortitude Saving Throw.

CHIROPALMUS QUADRIGATUS

Common Name(s): Fire Medusa, Indringa, Sea Wasp

Dose: .016oz(450mg)

DC: 25 + 1 Per Tenticle

Onset: 10 + 2D10 Rounds

Duration: 2D2 Days

Symptoms: Convulsions/Seizures, Cramps, Headache, Minor Swelling (Wound), Nausea/Vomiting, Numbness, Severe Localized Pain (Back, Lungs, Wound), Weakness

Damage: Cardiac Failure 6D10+5 3D4 Per Hour, Kidney Failure 3D20+10 3D6 Per Hour, Necrotic Ulcer 1D4 Per Tenticle, Paralyzation, Shock

Save: Save Vs Cardiac Failure (Reduces Damage by 75%), Save Vs Kidney Failure, Reduce Duration By 60%

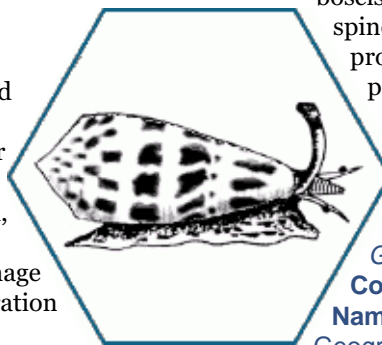
The Fire Medusa is a smaller relative of the Box Jellyfish. This jellyfish is the size of a large apple, and the number of tentacles on each of the four bundles seldom exceeds nine. The tentacles are also shorter and finer than those of the Box Jellyfish. Its venom is similar to Box Jelly venom, but the quantity of venom is much lower and the scarring is minimal.

CONUS

Common Name(s): Cone Shell Snail

Dose: .007oz(200mg)

Nematocysts are contained in special cells called stinging Cnidocytes. When not being used, a Nematocyst is coiled up like a spring inside the Cnidocyte. One end of the coil is attached to the cell reservoir containing venom, while the other end resembles a sting barbed like a harpoon. The Cnidocytes are usually located along the tentacles that surround the mouth, but can be an any number of tentacles. Upon contact with anything, except members of the same species, each stinging cell discharges a harpoon-sting covered in venom into the skin. Each tentacle will be covered with millions of these stinging cells, resulting in a large amount of venom being injected over a wide area



Conus Marmoreus

DC: 18

Onset: 2D6 Rounds

Duration: 3D8 Rounds

Symptoms: Blurred Vision, Cramps, Incoordination, Localized Pain, Minor Swelling (Sting), Nausea /Vomiting, Numbness, Weakness

Damage: Paralyzation, Mild Asphyxiation 1D4 Per Round

Save: Save Vs Paralyzation, Save Vs Mild Asphyxiation (Reduces Duration By 85%)

Cone Shell Snails are sea snails that have smooth cone-shaped shells, with colorful mottling and long, narrow openings in the base. They live under rocks, in crevices and coral reefs, and along rocky shores and protected bays in tropical areas. They prey upon other marine life, immobilizing them with their venom. In the environment of the cone shells, it has been necessary for them to develop an effective method for immobilizing prey much quicker than themselves. The snail's lack of physical agility gives way to a highly potent toxin to paralyze its prey.

The Cone Shell Snail detects prey in its environment using a siphon full of receptors. When prey is detected, it extends a proboscis out towards the target. Upon contact with the prey, the proboscis impales a harpoon like spine into any exposed tissue of the prey and injects the venom. The harpoon is attached to the snail via a sinew line, the prey becomes tethered to the snail, leaving little opportunity to escape. The venom is produced in a long tubular duct that is several times the length of the snail itself and at one end is attached to a muscular bulb to provide the necessary force of injection through the spine. Once the prey is fully paralyzed, the snail retracts the line and engulfs the prey with the proboscis opening. The cone shell can reload additional spines for multiple envenomation by retracting the proboscis and grasping another. Most cone shells prey on worms or on other mollusks, including snails of their own kind. There are also about 70 species that prey on fish.

Conus Geographus
Common Name(s): Geographer Cone

Name(s): Geographer Cone Shell

Conus Lynceus

Common Name(s): Korean Cone Shell

Conus Marmoreus

Common Name(s): Marbled Cone, Queensland Cone Shell

Conus Textile

Common Name(s): Cloth Of Gold

Conus Tulipa

Common Name(s): Tulip Cone Shell

There are about 500 species of cone shells, all of which are venomous. They are often named for their locations or style of shell, so a GM has free reign to customize a particular Cone Shell Snail, even to fantasy or sci-fi locations.

CHAPTER 5 - MARINE VENOMS

DASYATIS

Common Name(s): Stingray

Dose: .98oz(27.7G)

DC: 25

Onset: Instant

Duration: 1D6 Hours (Pain, 1D4 Months)

Symptoms: Nausea/Vomiting, Severe Localized Pain, Swelling (Limb)

Damage: Bleeding 1D1 Per Round, Shock

Save: Save Vs Shock

Stingrays live in warm temperate and tropical zones in a great abundance. Their mouth is positioned on the undersurface of their body, making it easier to find food on or in the sandy bottoms of the ocean. Rays feed on live crustaceans, shellfish and other invertebrates. Instead of teeth, rays have crushing plates that allow them to grind their food.

The disk-like body of the stingray forms an almost perfect rhombus with pointed corners. They have flexible tapering tails that are very often armed with one or more saw-edged, envenomed spines. With only a few exceptions, they don't have dorsal and pelvic fins. Stingrays prefer warmer waters, so when it gets cold, they will seek warmer waters or dive deeper away from cold currents.

Stingrays are not aggressive by nature. They lay on the sea bottom peacefully and are -10 to spot by normal means. They sting only when stepped on or handled. Large Stingrays have enough force to break a wooden boat by lashing their tails. The venom breaks down rapidly in the presence of heat. The best treatment is to immerse the wound in water that is as hot as can be tolerated without producing a burn for 60 to 90 minutes. An injury can be prevented if the feet are "shuffled" in the water before stepping down. This will startle a stingray and give it a chance to swim away.

Stingrays are often mistaken for Manta Rays. Manta Rays are larger, reaching a much greater body width and have a diamond-shaped disc. Manta Rays lack a stinging barb and are therefore relatively harmless. Their head also has odd fins that guide plankton into the mouth.

Dasyatis Americana Stingray

Common Name(s): Southern

Stingray

Dasyatis Thetidis

Common Name(s): Black

Stingray

Dasyatis Brevicaudata

Common Name(s): Short Tail

Black Stingray, Smooth

Stingray

Dasyatis Violacea

Common Name(s): Pelagic

Stingray

Dasyatis Fluviorum

Common Name(s): River

Stingray

Potamotrygon Laticeps

Common Name(s):

Amazonian Freshwater

Stingray

Dasyatis Sabina

Common Name(s): Atlantic

GLAUCUS

Common Name(s): Lizard Nudibranch

Venom: See *CHIRONEX FLECKERI*, *CHIROPSALMUS QUADRIGATUS*, or *PHYSALIA*

Nudibranch are snails without shells, like slugs. Unlike land slugs, however, most Nudibranch are spectacularly colored in red, yellow, orange, blue, green or a combination of colors. For most Nudibranch, this flamboyant coloration serves as camouflage and imposes a -8 to normal attempts to detect the creature when crawling on coral, sponges, anemones or other marine animals. For the poisonous species, the bright colors and patterns also warn predators to stay away or suffer the consequences.

The lack of shells to protect their soft bodies has forced the Lizard Nudibranch to develop an interesting method of self-protection. While most are content simply hide, the Lizard Nudibranch eat animals with stinging cells or sponges with glass-like spikes. Lizard Nudibranch store the defensive material in their bodies. When disturbed by other animals, it uses its recycled sponge spicules or stinging cells against them. These lizard-shaped Nudibranch float far offshore on the

water's surface, by means of an air bubble in the stomach, and eat Portuguese Man-Of-Wars, Bluebottles, Box Jellyfish, and other drifting jellyfish relatives. Somehow, Lizard Nudibranch can eat the tentacles without discharging their nematocysts. It also appears that they are able to select the most venomous of nematocysts for their own use. They store these weapons in special sacks, called Cnidosacks, in frilly projections of their body. When disturbed, the cells fire and envenom potential predators.

Glaucus Atlanticus

Common Name(s): Atlantic Lizard Nudibranch

Glaucilla Marginata

Common Name(s): Blue Lizard Nudibranch

HAPALOCHLAENA

Common Name(s): Blue-Ringed Octopus

Dose: .09oz(2.55G)

DC: 19

Onset: 1D8 Hours

Duration: 1D4+20 Hours

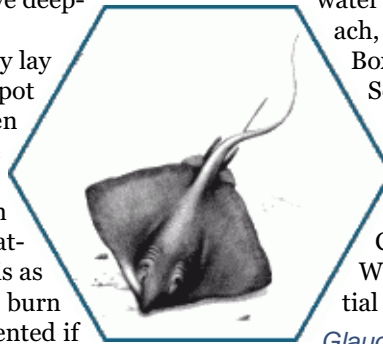
Symptoms: Dizziness, Numbness, Sweating, Swelling (Bite), Weakness

Damage: Asphyxiation 3D20+10, Paralyzation (Limb)

Save: Reduce Damage By 80%, Reduce Duration By 50%

This very small octopus, measuring no more than 7.8" across spread tentacle, can be found from Japan to Australia in shallow tropical water and in tide pools, where it skillfully hunts for crabs and other crustaceans. They are given the blue ring name because they will display differently shaped rings or stripes of blue when excited. When not agitated or mating, the octopus has a natural camouflage that imposes a -5 to normal attempts to detect the creature.

Females initiate reproduction coloring and posturing. The male will then approaches to begin courtship. Courtship con-



Dasyatis Thetidis

CHAPTER 5 - MARINE VENOMS

sists of caressing. Shortly thereafter, the female will begin to lay her eggs and carry them in her arms.

A bite is nearly painless, but will break the skin in most cases. The venom is not injected, but enters the wound via the saliva. The venom applied by the blue ring octopus is not produced by itself, but by bacteria inhabiting the salivary glands of the octopus. The bacteria is transferred from the mother to the young and even the eggs contain sufficient amounts of venom to be harmful. The venom has two components that can be separated by simple means. The first is most effective on crustaceans but harmless to humans. The other is similar to the toxin present in the Pufferfish and serves to as a defense against predatory animals.

Haplochlæna Fasciata Blue Ring Octopus

Common Name(s): Southern Blue Stripe Octopus

Haplochlæna Maculosa

Common Name(s): Southern Blue Ring Octopus

Haplochlæna Lunulata

Common Name(s): Great

LOPHOZOZYMUS PICTOR

Common Name(s): Mosaic Crab, Red & White Reef Crab, Thunder Crab

Dose: .000000125oz(.0035mg)

DC: 29

Onset: 10D30 Minutes

Duration: 3D6 Hours

Symptoms: Convulsions/Seizures, Cramps (Stomach), Dizziness, Nausea/Vomiting, Numbness, Pain (Back), Weakness

Damage: Asphyxiation 5D20+10

Save: Reduce Damage By 20%

This is a very common and brightly colored crab in Asian waters, hiding in burrows, under rocks and driftwood. The Mosaic Crabs emerge from their holes at high tide to eat. These crabs deliberately harvest toxins from all kinds of poisonous sea creatures and concentrate them in their bodies. A single Mosaic Crab is no bigger than the palm of one's hand but contains enough potential poison to kill 400 humans. If you are bitten by a snake, you can be treated if the right serum is available, but there are no drugs to treat the Mosaic Crab's deadly concoction of poisons. It also resists getting dislodged from a hole by pushing its arms and body against the walls of its crevice. When caught, it will sometimes play dead by remaining motionless.

Some fisherman call this crab Thunder Crab. They believe only a clap of thunder will make one release its grip when it pinches. This is untrue, and in such a situation with many crabs, it is probably more effective to allow the crab contact with the ground and an escape route!

OSTRACIIDAE

Common Name(s): Boxfish, Cowfish, Turretfish

Dose: .09oz(2.55G)

DC: 22

Onset: !D4 Hours

Duration: 2D4 Hours

Symptoms: Pain (Abdominal), Diarrhea, Convulsions /Seizures, Nausea/Vomiting, Numbness, Sweating, Weakness

Damage: Mild Asphyxiation 3D10+5

Save: Reduce Duration By 40%, Reduce Damage By 40%

The Boxfish are so named because of their bony, box-like body structure. They are also sometimes called Cowfish for the little horns that protrude above their eyes. They can grow to be 5" or 6" and tend to be slow swimmers due to tiny, fluttering pectoral and caudal fins. Their skin is situated into three layers. These layers are the outer epidermis is a tough dermal carapace made hard by small bony tubercles located all over the skin.

To protect themselves from predators Boxfish secrete a poison mucous that can kill or seriously irritate the fish nearby when put under stress. The poison that is secreted from the Boxfish originates from the epidermal layer and seeps from pores in the epidermis. Boxfish differ from most other toxic fish in that they are susceptible to their own poison.

Acanthostracion Polygonus

Common Name(s): Honeycomb Cowfish

Common Name(s):

Longhorn Cowfish

Lactoria Fornasini

Acanthostracion Quadricornis

Common Name(s):

Scrawled Cowfish, Scribbled Cowfish

Common Name(s):

Hawaiian Cowfish,

Thornback Cowfish

Ostracion Cubicus

Anoplocapros Lenticularis

Common Name(s): Barred Cowfish

Common Name(s): Yellow

Spotted Boxfish, Yellow

Spotted Cube

Arcana Aurita

Common Name(s): Shaw's Cowfish

Ostracion Meleagris

Common Name(s): Blue Spotted Boxfish, Hawaiian Boxfish

Arcana Ornate

Common Name(s): Ornate Cowfish

Tetrasonus Gibbosus

Common Name(s): Camel Cowfish, Helmet Cowfish, Humpback Turretfish

Lactoria Cornuta

PHYSALIA

Common Name(s): Bluebottle, Portuguese Man-O-War

Dose: .007oz(200mg)

DC: 11

Onset: 1D4 Rounds

Duration: 2D6 Hours

Symptoms: Body Aches (Joints), Headache, Major Swelling (Joints), Minor Swelling (Wound), Nausea/Vomiting, Severe Pain, Weakness

Damage: None

Save: Reduce Duration By 75%

The Bluebottle is not a single animal but a colony of four kinds of highly modified individual polyps. The polyps are dependent on one another for survival. The Bluebottle's body consists of a nitrogen gas-filled bladder-like polyp called a Pneumatophore, and a translucent crested envelope, tinted

CHAPTER 5 - MARINE VENOMS

pink, blue, or violet, growing 3" to 12" long and as much as 6" above the water. This colony moves by means of its crest, which functions as a sail. Beneath the float are clusters of polyps, from which hang tentacles of up to 165' in length. There are three types of polyp in this cluster: Dactylozoid, Gonozoid, and Gastrozoid. These are concerned, respectively, with detecting and capturing prey, reproduction, and feeding.

Tentacles of the dactylozooids bear the stinging nematocysts common to jellyfish for the paralyzation of small fish and other prey. The Gastrozooids attach to an immobilized victim, spread over it, and digest it. The Bluebottle itself will eat nearly anything that comes in contact with the stinging tentacle polyps. As Bluebottles drift down wind, their long tentacles "fish" continuously through the water. Muscles in each tentacle contract and drag prey into range of the digestive polyps, which, acting like small mouths, consume and digest the food by secreting a full range of enzymes that variously break down organic prey. The prey consists mostly of small crustaceans, small fish, algae and other members of the surface plankton.

The Bluebottle occurs commonly in the tropical and subtropical regions of the Pacific and Indian oceans, and the northern Atlantic Gulf Stream, although found in warm seas throughout the world. It is sometimes found swarming in groups of thousands.

The Bluebottle is eaten by other animals, including the loggerhead turtle. The small Bluebottle Fish lives among the tentacles of the Bluebottle and feeds on the tentacles, which are constantly regenerated. Clown Anemone Fish and Yellow-Jack Fish reportedly have a similar relationship and all are nearly immune to the poison from the stinging cells.

Physalia Utriculus

Common Name(s): Bluebottle, Palalia

Physalia Physalis

Common Name(s): Pololia, Portuguese Man-O-War

SCORPAENIDAE

Common Name(s): Featherfins, Lionfish, Scorpion Cods, Scorpionfish, Stonefish, Turkeyfish, Zebrafish

Dose: .007oz(200mg)

DC: 25

Onset: 3D2 Hours

Duration: 1D6 Months

Symptoms: Cramps, Nausea/Vomiting, Numbness, Severe Localized Pain, Swelling (Limb)

Damage: Cardiac Failure 4D30+20, Paralyzation (Limb)

Save: Save Vs Paralyzation, Save Vs Cardiac Failure (Reduces Damage By 95%)

The Scorpaenidae family is divided into three groups based

on the structure of the venom organs: the Lionfish, Stonefish And Scorpionfish Proper. Coloration varies wildly in this family, and Scorpionfish are masters of camouflage, using flaps of skin and other small growths to blend into the background or bottom and encouraging plants to grow on their skin. These highly successful techniques imposes a -10 to any attempts at detecting the fish. The most prominent feature of the Scorpionfish is the sharp, pointed spines, found in the fins, especially along the dorsal fin and many have small fleshy or bony protuberances on their face. Shoes have proven to be little protection from the spines of the Scorpionfish.

Some Scorpionfish species, including the Lionfish, have large numbers of eggs that reach maturity. The eggs stay in the female's body until they hatch, ensuring that the eggs are safe. Still, when the hatchlings are released into the water, many fall prey to other fish. Several thousand young must be produced each season so that a sufficient number will survive. The California Scorpionfish (*Scorpaena Guttata*) and some tropical species also lay eggs. The eggs are embedded in a large, hollow, gelatinous balloon that floats on the water's surface.

Scorpionfish are not to be confused with fish that are poisonous to eat, or with those fish that discharge toxin directly into the water, such as puffers or boxfish. Despite their ability to produce and discharge these toxins, and their sometimes formidable appearance, all of the Scorpionfish are edible.

Dendrochirus Biocellatus
Common Name(s): Twospot Turkeyfish

Parascorpaena Mcadamsi
Common Name(s): Mcadam's Scorpionfish

Dendrochirus Brachypterus
Common Name(s): Shortfin Turkeyfish

Parascorpaena Mossambica
Common Name(s): Mozambique Scorpionfish

Dendrochirus Zebra
Common Name(s): Zebra Turkeyfish

Pontinus Castor
Common Name(s): Longsnout Scorpionfish

Iracundus Signifer
Common Name(s): Decoy Scorpionfish

Pontinus Clemensi
Common Name(s): Mottled Scorpionfish

Pontinus Furcirhinus
Common Name(s): Red Scorpionfish

Pontinus Longispinis
Common Name(s): Longspine Scorpionfish

Pontinus Rathbuni
Common Name(s): Highfin Scorpionfish

Scorpaenodes Scaber
Common Name(s): Pygmy Scorpionfish

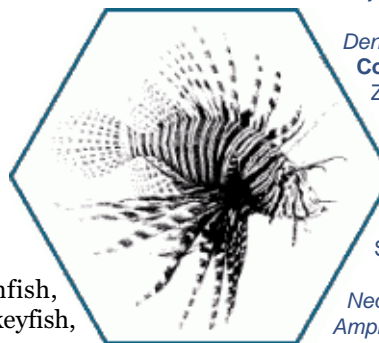
Scorpaenodes Staibi
Common Name(s): Yellow-Back Scorpionfish

Neomerinthe Folgari
Common Name(s): Folger's Scorpionfish

Neomerinthe Hemingwayi
Common Name(s): Spinycheek Scorpionfish

Neosebastes Entaxis
Common Name(s): Orange-Banded Scorpionfish

In Australia, the Aborigines perform an ancient ritual dance to educate their children. It relates a message which is as important today as it was hundreds of years ago. It starts out with a pantomime of a man wading in the tide pools looking for fish. Suddenly, he steps on something which causes him to scream out in pain. It is a clay model of a fish with thirteen wooden spines protruding from its back. The fish represented in the dance is a stonefish, a member of the Scorpionfish family. The dancer writhes on the ground in apparent agony until the ritual ends, sadly, in a death song.



Dendrochirus Zebra

Neomerinthe Amplisquamiceps
Common Name(s): Orange Scorpionfish

CHAPTER 5 - MARINE VENOMS

Lionfish: Unlike most Scorpionfish, which lie still in the sand or on rocks, the Lionfish swims around freely in and around sheltered crevices. The Lionfish can effortlessly hover above the rocks, using their many fins. They even have the rare ability to swim upside down. Lionfish only really get animated when they are hunting. The preferred prey of Lionfish is Silver Sweeper (*Pempheris Oualensis*) a small fish that travels in massive shoals. The main benefit of a shoal is to confuse predators, as the fish turn, it becomes difficult to single out an individual fish. When a Lionfish approaches a shoal of Silver Sweepers it slowly moves in with its fins, especially the wide pectoral fins extended to their maximum, trying to herd the smaller fish in one direction. Usually there are two or three Lionfish moving in on the shoal together. As the Silver Sweepers back away from the approaching Lionfish, they are pushed into a more restricted space. Eventually, one Silver Sweeper makes a mistake and becomes separated from the group. The nearest Lionfish, if successful, sucks the prey into it's huge mouth as it flares its gills and rushes forwards.

Their other hunting strategy is the surprise ambush. While Lionfish are easy to see in open water, their camouflage makes them difficult to spot in the coral reef and imposes a -4 to any attempts at detecting the creature. While hidden on the reef, the Lionfish is always on the look out for a passing meal and any small fish that comes in range is potential prey.

Dendrochirus Barberi
Common Name(s): Hawaiian Lionfish

Scorpionfish
Scorpaenopsis Gilchristi
Common Name(s): Gilchrist's Scorpionfish

Inimicus Filamentosus
Common Name(s): Two-Stick Stingfish

Scorpaenopsis Lactomaculata
Common Name(s): Whiteblotched Scorpionfish

Parapterois Heterurus
Common Name(s): Blackfoot Firefish

Scorpaenopsis Oxycephalus
Common Name(s): Tassled Scorpionfish

Pterois Antennata
Common Name(s): Broadbarred Firefish

Sebastapistes Cyanostigma
Common Name(s): Yellow-Spotted Scorpionfish

Pterois Miles
Common Name(s): Devil Firefish

Sebastapistes Mauritiania
Common Name(s): Spineblotch Scorpionfish

Pterois Radiata
Common Name(s): Radial Firefish

Sebastapistes Strongia
Common Name(s): Barchin Scorpionfish

Pterois Voltans
Common Name(s): Red Lionfish

Sebastapistes Tinkhami
Common Name(s): Darkspotted Scorpionfish

Scorpaenopsis Cacopsis
Common Name(s): Jenkin's Scorpionfish

Sebastes Fasciatus
Common Name(s): Acadian Redfish

Scorpaenopsis Cirrhosa
Common Name(s): Weedy Stingfish

Sebastes Serriceps
Common Name(s): Treefish

Scorpaenopsis Diabolus
Common Name(s): False Stonefish

Sebastapistes Ballieui
Common Name(s): Spotfin Lionfish

Scorpaenopsis Gibbosa
Common Name(s): Humpback

Stonefish: Stonefish are considered ugly by even the most kindhearted. The head and body of the stonefish are covered with lumps and fleshy growths and the eyes are set deeply in bony hollows of the head. The large mouth is upturned and partly disguised by a fringe of skin. The skin itself is mottled gray or brown to match nearby stones and imposes a -10 to normal attempts to detect the motionless creature. The stonefish uses its large front fins to scoop out a depression in the sand or mud and lies motionless awaiting small fish and crustaceans to draw near. They also secrete chemicals that encourage plants and urchins to grow on their backs, further adding to the camouflage. Deceived by this convincing disguise, passing prey is swallowed whole as the stonefish makes an energetic lurch forwards.

Deadly but not aggressive, Stonefish are by far the most dangerous members of the Scorpionfish family. The combination of immobile existence and remarkable camouflage is the cause of most stonefish stings inflicted on humans, as the fish is brushed against or stepped upon unwittingly.

Sebastes Pinniger
Common Name(s): Canary Stonefish

Scorpaena Papillosa
Common Name(s): Red Rock Cod

Scorpaena Loppei
Common Name(s): Cadenat's Stonefish

Sebastes Maliger
Common Name(s): Quillback Stonefish

Sebastes Auriculatus
Common Name(s): Brown Stonefish

Pontinus Kuhlii
Common Name(s): Offshore Stonefish

Sebastes Mystinus
Common Name(s): Blue Stonefish

Scorpaena Normani
Common Name(s): Norman's Stonefish

Sebastes Paucispinis
Common Name(s): Bocaccio

Scorpaenodes Arenai
Common Name(s): Messina Stonefish

Sebastes Levis
Common Name(s): Cow Cod

Scorpaena Madurensis
Common Name(s): Madeira Stonefish

Scorpaena Angolensis
Common Name(s): Angola Stonefish

Sebastes Chlorostictus
Common Name(s): Green-Spotted Stonefish

Scorpaena Brasiliensis
Common Name(s): Barbfish

Pontinus Accraensis
Common Name(s): Ghanean Stonefish

Sebastes Miniatus
Common Name(s): Vermilion Stonefish

Sebastes Nigrocinctus
Common Name(s): Tiger Stonefish

Sebastes Nebulosus
Common Name(s): China Stonefish

Scorpaena Elongata
Common Name(s): Slender Stonefish

Sebastes Caurinus
Common Name(s): Copper Stonefish

Neosebastes Pandus
Common Name(s): Rough Gurnard Perch

Sebastes Flavidus
Common Name(s): Yellowtail Stonefish

Scorpaena Laevis
Common Name(s): Senegalese Stonefish

Sebastes Ruberrimus
Common Name(s): Yelloweye Stonefish

CHAPTER 5 - MARINE VENOMS

SIGANUS

Common Name(s): Rabbitfish, Spinefoot

Dose: .09oz(2.55G)

DC: 12

Onset: 1D6 Rounds

Duration: 1D8 Hours

Symptoms: Severe Localized Pain, Swelling (Limb)

Damage: None

Save: Reduce Duration By 50%

Rabbitfish are found predominantly on the reefs in the Pacific and Indian oceans, and may be found in small schools on or near sea grass beds or weedy bottoms, or amongst coral reefs in pairs. They average about 11" long, easily recognized by their small, hare-like mouths, large dark eyes, and a peaceful temperament which gives them their name. The dorsal fin is continuous and the spines of all fins are venomous and protect it from would be predators. The venom is not lethal, but the wounds are extremely painful. All of the species of Rabbitfish are herbivorous and feed on algae.

TERRAODONTINAE

Common Name(s): Balloon Fish, Blowfish, Burrfish, Fugu, Globefish,

Siganus Corallinus

Common Name(s): Coral Rabbitfish

Siganus Guttatus

Common Name(s): Golden Rabbitfish, Golden-Lined Spinefoot

Siganus Javus

Common Name(s): Streaked Rabbitfish, Java Rabbitfish

Porcupine Fish, Pufferfish, Swellfish

Dose: .00005oz(1.4mg)

DC: 30

Onset: 1D8 Hours

Duration: 1D4+20 Hours

Symptoms: Convulsions/Seizures, Dizziness, Difficulty Speaking, Numbness, Sweating, Weakness

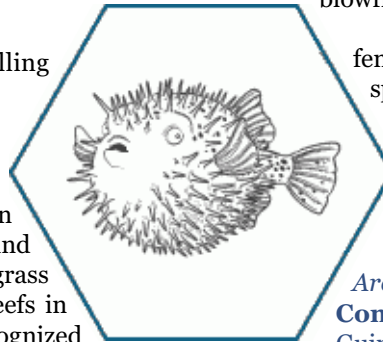
Damage: Asphyxiation 3D20+10, Cardiac Failure 5D20+20, Paralyzation

Save: Reduce Duration By 50%

The poisonous Pufferfish is so named because when threatened, it puffs up to about twice its normal size by gulping water. When puffed up, they are almost spherical. In this engorged state, the Pufferfish can swim at only about half its normal speed, but becomes impossibly hard to swallow by most predators. There are almost 100 species of Pufferfish found in sub-tropical and tropical marine waters, including coral reefs, and some live in brackish and fresh water. Pufferfish range in

size from just 3" to almost 2' long. A few species of Pufferfish have spines on their body to make them even less attractive to their enemies. The poisons are produced by bacteria and concentrate in the liver, muscles, skin, and ovaries of the fish. One blowfish contains enough poison to kill 30 people.

Puffers are highly territorial, each male and female defending an area from others of the same species and gender. But a male's territory may overlap those of several females, and he mates with all of these. Some attach their eggs against rocks, in others, the male may defend these sites.



Canthigaster Punctatissimus

Arothron Meleagris

Common Name(s): Golden Pufferfish, Guinea Fowl Pufferfish

Arothron Nigropunctatus

Common Name(s): Black Spotted Pufferfish, Dogfaced Pufferfish

Canthigaster Bennetti

Common Name(s): Bennett's Pufferfish

Canthigaster Valentini

Common Name(s): Black Saddle Pufferfish

Canthigaster Coronata

Common Name(s): Four Barred Pufferfish

Canthigaster Callisterna

Common Name(s): Freckled Sharp Nose Pufferfish

Canthigaster Janthinoptera

Common Name(s): Honeycomb Pufferfish

Canthigaster Leopardus

Common Name(s): Leopard Skin Pufferfish

Canthigaster Natalensis

Common Name(s): Natal Sharp Nosed Pufferfish

Canthigaster Rostrata

Common Name(s): Pearly Sharp Nosed Pufferfish

Canthigaster Punctatissimus

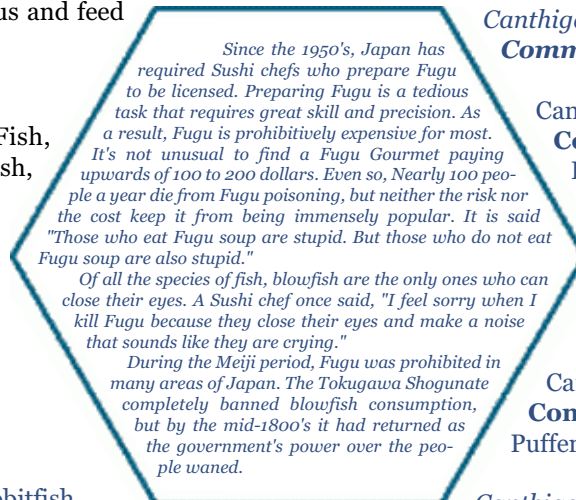
Common Name(s): Sharp Nosed Pufferfish

Canthigaster Rapaensis

Common Name(s): Rapa Sharp Nosed Pufferfish

Canthigaster Valentini

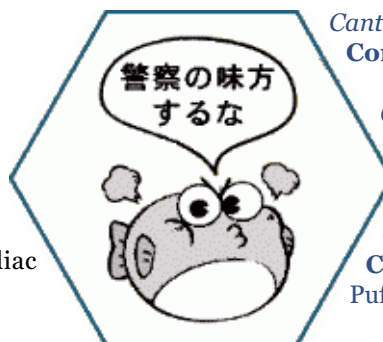
Common Name(s): Valentine Pufferfish



Since the 1950's, Japan has required Sushi chefs who prepare Fugu to be licensed. Preparing Fugu is a tedious task that requires great skill and precision. As a result, Fugu is prohibitively expensive for most. It's not unusual to find a Fugu Gourmet paying upwards of 100 to 200 dollars. Even so, Nearly 100 people a year die from Fugu poisoning, but neither the risk nor the cost keep it from being immensely popular. It is said "Those who eat Fugu soup are stupid. But those who do not eat Fugu soup are also stupid."

Of all the species of fish, blowfish are the only ones who can close their eyes. A Sushi chef once said, "I feel sorry when I kill Fugu because they close their eyes and make a noise that sounds like they are crying."

During the Meiji period, Fugu was prohibited in many areas of Japan. The Tokugawa Shogunate completely banned blowfish consumption, but by the mid-1800's it had returned as the government's power over the people waned.



CHAPTER 6 - TOXIC PLANTS

DANGEROUS PLANTS

Plants contain a large number of active chemicals. Some of these have been found to be extremely useful for treating various human and animal diseases. However, some plants produce chemicals adverse to human health. The onset of these effects can be sudden or take time to develop. Fortunately for us, among the thousands of plants, relatively few cause acute, life-threatening illnesses when ingested.

The diagnosis of plant poisonings can be difficult. Ingestion of many plants produces symptoms that could easily be symptoms of a disease. In most cases, the best way to support a diagnosis of plant poisoning is to confirm the presence of a toxic plant or plant poison, and confirm that the plant or poison has been ingested.

ABRUS PRECATORIUS

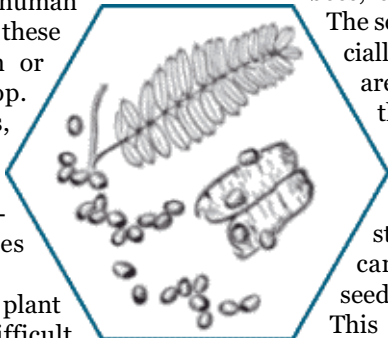
Common Names: Crab's Eye, Licorice Vine, Love Pea, Precarior Pea, Red-Bead Vine, Rosary Pea
Poison: Abrin
Dosage: 4 Seeds

This plant is slender with alternately placed compound leaves. Each leaf has about 20 pairs of narrow, oblong leaflets, looking like a delicate feather. The rose to purple flowers are crowded at the end of a stalk. Fruits are short, inflated pea-shaped pods, splitting open when mature to reveal the round, hard-coated, glossy, two-toned seeds. The seeds are scarlet and black at the base, looking a bit like lady beetles. The plant found mostly in the tropics and by warm seashores, mostly among the undergrowth and in hedges.

ACONITUM NAPELLUS

Common Names: Blue Rocket, Friar's Cap, Helmet Flower, Monk's Hood, Mousebane, Wolfbane
Poison: Aconitine
Dosage: 30-40/7oz(200G) Leaves, .10/10z(29G) Root

The plant is a hardy perennial, with a fleshy, spindle-shaped root, pale colored when young, but subsequently



Abrus Precatorius

acquiring a dark brown skin. The stem is about 3' high, with dark green, glossy leaves, deeply divided in palmate manner and flowers in erect clusters of a dark blue colors. The shape of the flower is specially designed to attract and utilize bees, especially the humble bee.

The sepals are purple, being specially attractive to bees, and are fancifully shaped, one of them being in the form of a hood. The undeveloped green fruits, which are in a tuft in the center of the stamens, each form a brown carpel containing a single seed.

This is a well known plant to even amateur assassins. In large amounts it is used to poison enemy water supplies during times of war, and hunters use its root to poison spears, arrowheads and trap baits as well.

AGROSTEMMA GITHAGO

Common Names: Cockle, Corn Cockle, Corn Rose, Crown-Of-The-Field, Purple Cockle
Poison: Githagine
Dosage: 10-12 Seeds

A well-known corn weed, the tall, slender stem, 2' to 4' high, has a dense coat of white hairs. The narrow, lance-shaped leaves, 4" to 5" in length, are produced in pairs and their stalkless bases meet around the stem. The large solitary flowers have very long stalks which issue from the axils of the leaves. They are 1.5" and 2" broad, with purple petals having pale streaks to the mouth of the tube. Sometimes, smaller flowers are produced in addition, which are entirely female, for the stamens are not developed. The flowers bloom from June to August, and are succeeded by a large, oval capsule, opening by five teeth, and containing about 2 dozen large black seeds.

AILANTHUS ALTISSIMA

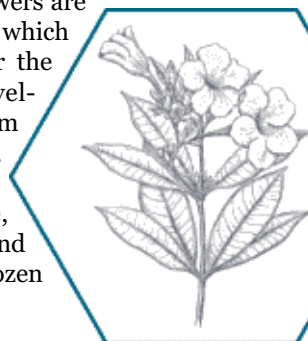
Common Names: Stinking Sumac, Tree Of Heaven, Varnishtree
Poison: Troente
Dosage: 30-40/7oz(200G) Flowers, 30-40/7oz(200G) Leaves

Ailanthus is a rapidly growing, deciduous tree found in mostly tropical areas. Mature trees can reach 80' or more in height. Ailanthus has smooth stems with pale gray bark, and twigs which are light chestnut brown, especially in the dormant season. Its large compound leaves, 1' to 4' feet in length, are composed of 11 to 25 smaller leaflets and alternate along the stems. Each leaflet has one to several teeth near the base. In late spring, clusters of small, yellow-green flowers appear near the tips of branches. Seeds are produced on female trees in late summer to early autumn, in flat, twisted, papery structures, which may remain on the trees for long periods of time. The wood of ailanthus is soft, weak, coarse-grained, and creamy white to light brown in color. All parts of the tree, especially the flowers, have a strong, offensive odor like rancid peanuts or cashews.

Besides some occasional gas or upset stomach, this plant is not very toxic to people. It is however a fast acting herbicide, very toxic to other plants. In nature the leaves and flowers drop from the plant and decay into the ground. This deposits the poisons from the plant into the soil to deter competition from other plants.

ALLAMANDA CATHARTICA

Common Names: Angel's Trumpet, Brownbud, Buttercup Flower, Golden Trumpet, Yellow Allamanda, Yellow Bell
Poison: Cirotine
Dosage: 3oz(85G) Bark, 15/4oz (113G) Leaves, 3oz(85G) Sap, 20-35 Seeds



Allamanda Cathartica

Golden-trumpet is a tropical woody scrambling shrub vine that grows up to 15' tall, most often found growing on riverbanks, large creeks or around open drainage systems. The big yellow funnel-shaped flowers are arranged long mostly at the end of the branches. The leaves are smooth, thick and pointed. The fruits are prickly capsules, splitting to release winged seeds.

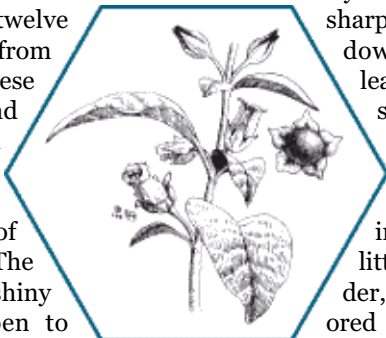
AMARYLLIS BELLADONNA

Common Names: Belladonna Lily, March Lily, Naked Lady
Poison: Belladonna

CHAPTER 6 - TOXIC PLANTS

Dosage: .5/12oz(341G) Bulb

Large clusters of scented, trumpet-shaped pink or white flowers are carried on a long purplish-red and green stem. The bulb is typically large, brown and rounded and has a moderate growth rate. Up to twelve flowers are produced from the flowering stem. These flowers are 4" long and atypically flare open about 7". Protruding from each flower is a long rounded group of large curved anthers. The anthers are black and shiny at first, but split open to reveal masses of sticky white pollen. The inflorescence tends to face the direction that receives the most sun. Although most flowers are pale pink, white and dark pink forms occur.



Amaryllis Belladonna

Amsinckia is a rank, slightly hairy plant, growing from 1' to 7' high. The thick, somewhat fleshy stem is leafy to the top, and branching above erect. The leaves are alternate, delicate and thin, very variable in size and form, sharply toothed, or divided right down to the middle into leaflets as they grow up the stem. The flowers are white or yellow and tubular and open from the bottom of the plant to the top causing the stem to uncoil. The little fruits are oblong, slender, tapering at the end, colored white or violet. The seeds are produced in fours and have small hooked spines used to hitchhike on fur or cloth. The whole plant is succulent, the odor rank and slightly aromatic, with a bitter and disagreeable taste.

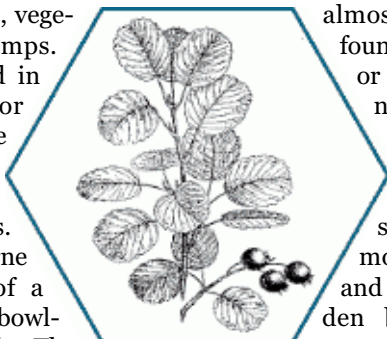
AMELANCHIER ALNIFOLIA

Common Names: Juneberry, Sarvis, Saskatoon, Serviceberry

Poison: Seride

Dosage: 1-3 Flower Buds, 3-4/1.5oz(42G) Leaves, 10-12 Seeds, 1-2/2oz(56G) Twigs, 2-5/2oz(56G) Young Shoots

Amelanchier is a deciduous shrub that grows in dense, vegetative propagated clumps. Leaves are simple, round in shape, have jagged or toothed margins, are about 1" to 5" long. The clusters of leaves contain 8 to 12 small white flowers. Flowers may also be borne from the side or end of a shoot. The flowers are bowl-shaped and have 5 petals. The fruit is a berry that changes color ranges from green to white, pink, red, and finally purple at maturity, mature berries appear to have a powdery white coating. A single berry can contain 10 seeds, but more commonly they contain 1-3 viable seeds.



Amelanchier Alnifolia

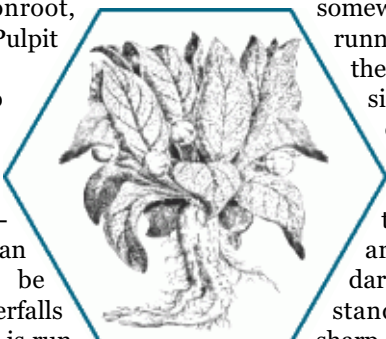
ARISAEMA TRIPHYLLUM

Common Names: Dragonroot, Indian Turnip, Jack-In-The-Pulpit

Poison: Lobline

Dosage: .33/7oz(199G) Bulb

Arisaema Triphyllum is found scattered throughout various terrains in mountainous regions, but it can almost always be found near waterfalls or where water is running or splashing. Three fairly large leaves radiating out from the top of the stalk are usually the most noticeable feature and the flower is often hidden beneath. The flowers appear through the spring and into the summer. Later in the summer, the flower is replaced by a black seed cluster that turns red by autumn.



Atropa Mandragora

grow up to 12" long, giving the Papaw a tropical appearance. The leaves turn yellow and begin to fall in mid-autumn and leaf out again in late spring after the tree has bloomed. The flowers produced are maroon and upside-down and are 2" across. The flowers bloom from spring to early summer. Each flower can produce multiple fruits. Individual fruits are 3" to 6" in length. The larger sizes will appear plump, with 10 to 14 seeds in two rows. The brownish to blackish seeds are shaped like Lima beans. Papaw fruits often occur as clusters of up to nine individual fruits. The ripe fruit is soft and thin skinned.

ATROPA MANDRAGORA

Common Names: Alraun, Brain Thief, Gallows, Herb of Circe, Ladykins, Mandrake, Raccoon Berry, Satan's Apple, Wild Lemon

Poison: Atropine

Dosage: .5/2oz(56G) Root

Mandragora has a large, brown root, somewhat like a parsnip, running 3' or 4' deep into the ground, sometimes single and sometimes divided into two or three branches. Immediately from the crown of the root arise several large, dark-green leaves that stand erect. They are sharp pointed at the apex and have a rank odor. The flowers each grow on a separate root-stalk, about 3" inches high. They are somewhat of the shape and size of a primrose, the corolla bell-shaped, cut into five spreading segments, of a whitish color tinged with purple. They are succeeded by a smooth, round fruit, about as large as a small apple, of a deep yellow color when ripe, full of pulp and with a strong, apple-like scent.

According to the old Anglo-Saxon herbal guides, Mandrake is endowed with power against demonic possession. In the 'Herbarium of Apuleius' there is a Mandrake prescription: 'For witlessness, that is devil sickness or demoniacal possession, take from the body of this said wort mandrake by the weight of three pennies, administer to drink in warm water as he may find most convenient - soon he will be healed.'

AMSINCKIA INTERMEDIA

Common Names: Fiddleneck, Fireweed

Poison: Intermedine

Dosage: 16-18 Seeds

ASIMINA TRILOBA

Common Names: Custardapple, Papaw, Pawpaw

Poison: Mitinate

Dosage: 1/5oz(142G) Fruit

The Asimina is a narrowly conical tree growing from about 12' to around 20'. The dark green, drooping leaves

CHAPTER 6 - TOXIC PLANTS

BAPTISIA TINCTORIA

Common Names: Baptisie, Baptisia, False Indigo, Horseflyweed, Indigoweed, Rattlebush, Wild Indigo

Poison: Baptisin

Dosage: 1/.5oz(14G) Leaf

Baptisia is a perennial with erect, slender branches bearing alternate grayish-green leaves with three oval leaflets. A long taproot allows Baptisia to survive the challenges of its native habitat. A mature plant will reach 3' to 5' feet, with graceful loose clusters of yellow or blue flowers in summer. It grows best in dry woods and clearings.

Prolonged exposure or ingestion of the leaves will cause skin and hair to become a rich violet-blue. The color is more or less permanent until the skin or hair is naturally replaced.

BASSIA HYSSOPIFOLIA

Common Names: Five-Hooked Bassia, Five-Horn, Smother-Weed

Poison: Oxalate(Oxalic Acid)

Dosage: 1/1oz(28G) Flower, 3/.5oz(14G) Leaf

Bassia leaves are long and grayish with soft white hairs. Leaves on very young plants grow in a rosette. Mature plants branch from a main stem. Blue flowers are borne in clusters along the ends of branches and bases of leaves. The fruit is five lobed with a hook on each lobe. Leaves are blue green, flat and narrow.

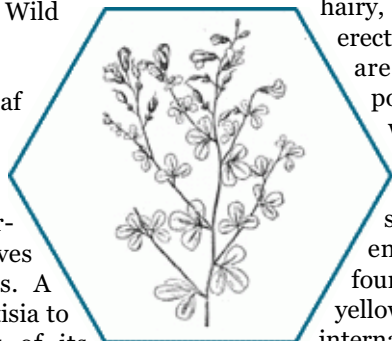
BRASSICA NAPUS

Common Names: Cole Seed, Rapeseed, Wild Corn Kale, Yellow Turnip

Poison: Glucosinola

Dosage: 12-24/6oz(170G) Leaves, 200-300/16oz(455G) Seeds

The Brassica is common in fields and by road sides. It is an erect annual, about 1' or more in height, with thin, wispy leaves and large, yellow, clustering flowers. It closely resembles the mustard plant, but is much smaller. The



Baptisia Tinctoria

fruit of the two plants differs considerably in shape, those of the cole seed being more or less horizontal and hairy, while mustard pods are erect and smooth. The pods are spreading, roundish where the seeds are situated, and provided with a very large flattened, sword shaped beak at the end. Each pod contains four to six globular seeds, yellow both on the surface and internally.

COLCHIAM AUTUMNALE

Common Names: Autumn Crocus, Michaelmas Flower

Poison: Colicine

Dosage: 3/3oz(85G) Flowers, 1/2.5(71G) Bulb, 1/.5oz(14G) Leaf, 14-20/.5oz(14G) Seeds, .5/2.5oz(71G) Stalk

The Colchium Autumnale is a wild flower found in meadows and woodlands. It's a perennial herb in the lily family which grows from a solid bulb that can unfortunately be mistaken for a wild onion. The rapier like leaves grow about a foot high, and in the early fall one or two leafless stalks sprout from the bulb; each stalk produces a single white-to-purplish-pink flower that resembles a crocus.

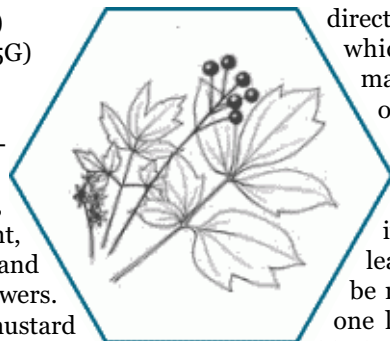
CAULOPHYLLUM THALICTROIDES

Common Names: Blue Cohosh, Blue Ginseng, Blueberry Root, Yellow Ginseng

Poison: Cytisine

Dosage: 1-3 Berries, 2oz(56G) Sap

This plant is well known amongst the natives of the thick forests. There are two or sometimes three divided leaves per branch. The lowest and largest branches have three emerging directly from the main stem which divide and bear many irregularly notched or lobed leaflets. Most people who have seen this plant might be surprised to learn that it has only two or three leaves. What appears to be many leaves is actually one large dark blue almost black stemless, much divided



Caulophyllum Thalictroides

leaf and another smaller above that. Sometimes there is a third. The flowers are green, purple and yellow. Blooms first appear in mid spring and continue into late spring. The berries are actually dark blue exposed seeds resembling berries and taste very sweet. A typical plant will spread into a clump 5' in diameter into a handsome bush throughout spring, summer and fall.

CODIAEUM VARIEGATUM

Common Names: Croton

Poison: Deoxyin

Dosage: 32oz(911G) Bark, 18oz(512G) Sap, 50/64oz(1822G) Leaves, 4/48oz(1366G) Root

The Codiaeum Variegatum has attractive, leathery leaves. There are many variations in leaf shape and size with colors ranging from vibrant yellows, oranges, reds to purples. Tiny star-shaped insignificant, yellow flowers are produced intermittently throughout Autumn. This plant is found in tropical or subtropical climates growing amongst other shorter shrubs. It also grows well in containers if keep well watered in dry weather.

CYCLAMEN PERSICUM

Common Names: Persian Violet, Sowbread

Poison: Cyclamin

Dosage: 6oz(170G) Tuber

Cyclamen is an unusual plant with dark green, heart-shaped foliage often marked with silver, sometimes toothed with a purplish or green underneath. Has scented, butterfly-like flowers in colors ranging from white to light pink, lavender, hot pink, and hot purple.

CICUTA VIROSA

Common Names: Cowbane, Wasserschierling, Water-Hemlock

Poison: Cicutol

Dosage: .75oz(21G) Sap

Cicuta Virosa is a perennial herb, which grows up to a height of more than 3'. It has a hollow stalk and a thick root stem. This root stem has many small pockets containing a yellow sap with an aroma like celery and a sweet taste like parsnip. The leaves will cluster in 2 and 3's, surrounded by tiny individual leaflets. The tiny white flowers grow in

CHAPTER 6 - TOXIC PLANTS

clustering umbels at the end of each branching stem during the summer.

CONIUM MACULATUM

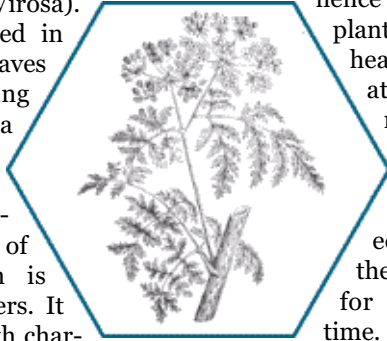
Common Names: Bunk, California Fern, Fern, Poison Hemlock, Poison Parsley, Poison Root, Snake Weed, Spotted Hemlock, Spotted Parsley, Winter Wode Whistle

Poison: Hemlock

Dosage: 3-4/.75oz(21G) Flowers, Leaves 3-4/.75oz(21G), .5/3oz(85G) Tuber, 15-20 Seeds, 7/3oz(85G) Stems, 25-30/3oz(85G) Young Shoots

Conium Maculatum can grow to be about 6' to 10' tall on long purple stalks and branches. White flower heads resemble those of parsnips, carrots, and water hemlock(Cicuta Virosa).

The flowers are arranged in showy umbels and its leaves are extremely nauseating when tasted. It has a fleshy, white taproot, it is usually un branched and can be easily distinguished from the root of water hemlock, which is made up of several tubers. It also has a main stem with characteristic light red spots and a disagreeable smell. This plant is found growing in waste ground, disturbed sites, pastures, open fields, low ditches, and road sides. Although sometimes confused with water hemlock, poison hemlock can be distinguished by its leaves and its root. The leaf veins of the poison hemlock run to the tips of the teeth. Those of the water hemlock run to the notches between the teeth.



Conium Maculatum

DATURA INNOXIA

Common Names: Angel's Trumpet, jimsonweed, Thorn Apple

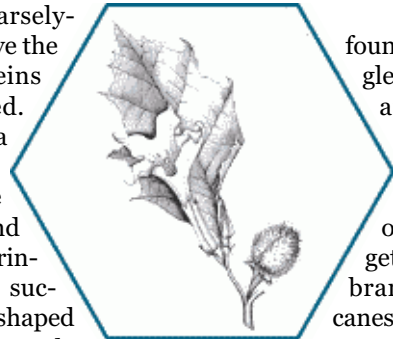
Poison: Hyoscyamine

Dosage: 20-25/2oz(56G) Seeds, 3/.5oz(14G) Flowers, .3/.3oz(8G) Root, 3/.5oz(14G) Leaves

The Datura is a large and coarse herb branching freely, giving a bushy look to the plant. It attains a height of about 3', its spreading branches covering an area almost as broad. On rich soil it may attain a height of even 6'. The root is very long, thick and whitish, giving off many fibers. The stem is stout, erect and leafy, smooth, a pale yellowish green in

color, branching repeatedly in a forked manner, and producing in the forks of the branches a leaf and a single, erect flower. The leaves are large and angular, 4" to 6" long, uneven at the base, with a wavy and coarsely-toothed margin, and have the strong, branching veins very plainly developed. The upper surface is a dark colored grayish green, smooth, the under surface paler, and when dry, minutely wrinkled. The flowers are succeeded by large, egg shaped seed capsules of a green color, about the size of a large walnut and covered with numerous sharp spines,

hence the common name of the plant. It exhales a rank, very heavy and somewhat nauseating narcotic odor. This rank odor arises from the leaves, especially when they are bruised. The flowers are sweet-scented, but produce a stupor if their perfumes are breathed for any serious length of time.



Datura Innoxia

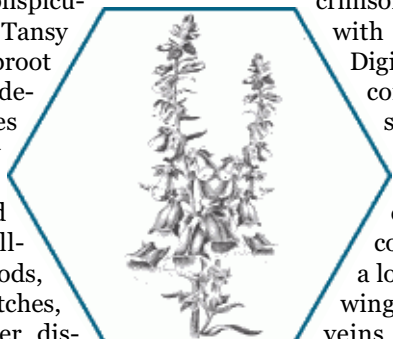
DESCURAINIA PINNATA

Common Names: Tansy Mustard, Tumble Mustard

Poison: Hortus

Dosage: 30/1oz(28G) Leaves, 45-50/1oz(28G) Seeds

Descurainia grows from 4" to 3' tall. The erect weedy stem is freely branched and has many tiny yellow-white flowers. Plants are showy when flowering but become ragged and inconspicuous as seeds mature. Tansy mustard has a deep taproot and is a hard to kill, wide-spread weedy species that grows on a variety of sites. It grows in trash dumps, disturbed areas, plains, dry hill-sides, prairies, open woods, along stream banks, ditches, road sides, or on other disturbed, open sites where mineral soil has been exposed.



Digitalis Purpurea

DIEFFENBACHIA BAUSEI

Common Names: Dumbcane,

Mother-in-Law

Poison: Oxalate

Dosage: .1/1oz(28G) Leaf, .05/1oz(28G) Root, .3/1oz(28G) Stem

This plant is commonly found growing in tropical jungles. The Dieffenbachia has an interesting blossom that consists of many small, inconspicuous flowers densely packed on a stalk. Dumbcane can get quite tall. Their rarely branching stems look like canes and can reach heights of over 10'. As they increase in size

it is quite natural for their large green, white, and yellow blotched leaves to be lost from the lower portions of the plant leaving just exposed canes. If the plant is ever bruised, it emits a skunk-like odor.

DIGITALIS PURPUREA

Common Names: Bloody Fingers, Dead Men's Bells, Fairy Caps, Fairy's Glove, Fairy Thimbles, Folk's Glove, Foxglove, Gloves of Our Lady, Virgin's Glove, Witches' Gloves

Poison: Digitalis

Dosage: 7-8/.1oz(2G) Flowers, 10-12/.1oz(2G) Leaves

In the first year, the Digitalis sends up a rosette of leaves, but no stem. In the second year, one or more flowering stems are thrown up, which are from 3' to 4' high that bear long spikes of drooping flowers. The flowers are bell-shaped and tubular, 1" to 2" inches long, with a crimson outside. There are long hairs inside and marked with numerous dark crimson spots, each surrounded with a white border. The Digitalis Purpurea derives its common names from the shape of the flowers, resembling the fingers of a glove. The leaves are often a foot or more long, contracted at the base into a long, winged foot stalk, the wings formed by the lower veins running down into it some distance. Needing little soil,

it is found often in the crevices of granite walls, as well as in dry hilly pastures, rocky places and by road sides.

CHAPTER 6 - TOXIC PLANTS

DIRCA PALUSTRIS

Common Names: Leatherwood, Moosewood, Wicopy
Poison: Thymela
Dosage: 1oz(28G) Bark

Dirca Palustris is a freely branching round woody shrub growing 3' to 6' tall with parchment-like bark. It has simple, light green deciduous leaves with an oval shape. In early spring the shrub grows pale yellow flowers clustered in 3 or 4's. The most common locations for the plant are forests or rich gardens.

ECHIUM VULGARE

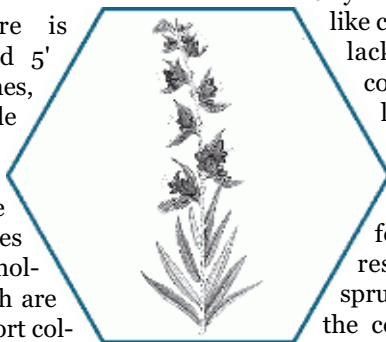
Common Names: Blueweed, Viper's Bugloss
Poison: Pyrrolizidine
Dosage: 1/10z(28G) Spine

This is an erect plant about 2' in height, with multiple branches arising from the root crown. The leaves are very hairy, becoming smaller towards the tip of the stems. Flower color varies from white to purple to blue. This plant is a continuous bloomer all summer. This plant is best viewed and not touched. The sharp spines, which cover the plant, are a powerful deterrent and become lodged in the skin much like those of a cactus. This weed was once only found along road sides and meadows, but is now becoming common in many urban areas, growing on walls, old quarries and in gravel pits.

EQUISETUM PALUSTRE

Common Names: Marsh Horsetail, Scouring Rush
Poison: Palustrine
Dosage: 25-27/15oz(427G) Leaves, 12-15/15oz(427G) Stems

Equisetum Palustre is usually between 1' and 5' high. It has many branches, bunched together in little whorls. There are little green teeth with white tips, found circling the stem where the branches grow. Horsetails have hollow, jointed stems, which are clothed in places by a short collar-like sheath. In some Horsetails, the top of the plant carries a little cone, covered with close-fitting scales. The underside of each scale is



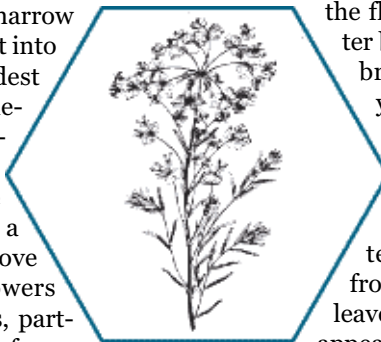
Echium Vulgare

covered with lots of tiny spores. These cones are unlike those produced by conifers, because the Horsetail cones produce spores instead of seeds. It can be found in wet meadows, at the side of streams, and other wet areas.

ERYSIMUM CHEIRANTHOIDES

Common Names: Treacle Mustard, Wormseed, Worm Seed Mustard, Worm Seed Wallflower
Poison: Lucosinolate
Dosage: 10-12/2oz(56G) Seeds

Erysimum rises up with a hard round stalk, about a foot high, parted into some branches, having divers, (soft long and narrow green leaves, but not cut into the edges) that broadest towards the end somewhat round and pointed. The flowers are white and grow at the ends of the branches in a spike-fashion, one above another. These flowers become round pouches, parted in the middle with a furrow, having one blackish brown seed on either side. This plant has a somewhat sharp taste, smelling and tasting of garlic.



Euphorbia Esula

EUPHORBIA CYPARISSIAS

Common Names: Cypress Spurge, Graveyard Spurge
Poison: Ingenol
Dosage: 9oz(256G) Sap

Euphorbia Cyparissias is an erect, branching, perennial which typically grows to 1' tall and can rapidly spread to form a bushy ground cover. Numerous tiny flowers appear in umbel-like clusters in spring. Flowers lack petals and primarily consist of showy lime-yellow fingers which age to red. Narrow, bluish-green, linear leaves grow to 1" long. Plant foliage superficially resembles that of a tiny spruce or cypress tree, hence the common name. They are often found in swamps and low wet lands.

EUPHORBIA ESULA

Common Names: Leafy Spurge, Wolf's-Milk
Poison: Oxynenol
Dosage: 3oz(85G) Sap

Euphorbia Esula is an erect, hairless perennial herb, generally 1' to 10' tall, forming dense clumps of tough, woody stems from a persistent and spreading root system on which numerous shoot buds form. All parts of the plant contain a milky sap. The alternate leaves are narrow, elongate and long with a narrow base attached directly to the stem. The terminal, somewhat flattened, flower cluster is surrounded by a whorl of small narrow leaves at its base. Each of the flowering stems of the cluster bears several pairs of small, broadly rounded, pointed, yellowish-green leaves that markedly decrease in size towards the tip where the tiny flowers are borne. Simpler flower clusters also commonly arise from the buds of the upper leaves, giving the plant a bushy appearance. The minute seeds tend to be mottled with brown and have a yellowish fleshy outgrowth.

Leafy spurge is found on agricultural lands such as grain fields and pastures as well as along road sides, in meadows and disturbed places, as well as in native prairies, savannahs and open woodlands. This is a highly toxic plant. Simply coming into contact with the sap will cause heart Failure and death.

EUPHORBIA HELIOSCOPIA

Common Names: Sun Spurge, Wart Spurge
Poison: Xyphorbol
Dosage: 3oz(85G) Sap

Euphorbia Helioscopia is a somewhat rare weed of pastures, hayfields, and other small grains. The stems are stout, growing prostrate along the ground with tips ascending. Stems are distinctly red-tinged and radiate outward from a central point. They may be sparsely hairy, especially in the upper portions. The leaves of the upper stem appear whorled but usually occur in groups of 2 or occasionally 3. Leaves are oppositely arranged along the stem and are widest at the apex and taper to the base. The flowers are inconspicuous,

CHAPTER 6 - TOXIC PLANTS

light green to pale yellow in color. When seeding it produces a very distinctive 3-parted capsule that contains a single, dark brown seed. The distinctive red stems, leaves with finely toothed leaf apices, and milky sap are all characteristics that help in the identification of sun spurge.

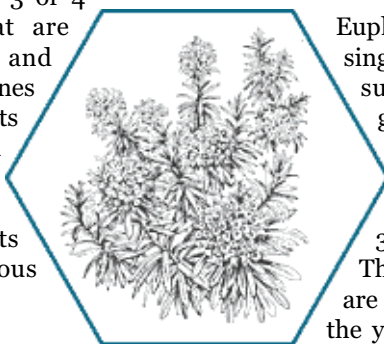
EUPHORBIA LACTEA

Common Names: Brain Plant, Candelabra-Cactus, Dragon Bones, Dragon Tree, Elkhorn, White Ghost

Poison: Kerato

Dosage: 3oz(85G) Sap

Euphorbia Lactea is a milky white cactus-like plant with 3 or 4 angled branches that are deeply scalloped and speckled with black spines native to the arid parts of India. It is used medicinally in India as a hot jam to treat rheumatism. All parts contain the poisonous milky sap.



Euphorbia Tirucalli

are purplish brown and are 1-2' tall on average, but can reach 3' in a warm climate. The thorns are sharp pointed and are half an inch long on average. The oval leaves are 1-3" long, few in number, and are found mostly at the growing ends. The leaves are born in small umbels and have showy, oval and bright red bracts. The small flowers are produced in clusters of 2-8 at the tips of green flower stem about 1" long.

EUPHORBIA TIRUCALLI

Common Names: Pencil Plant, Pencil Tree

Poison: Tengenol

Dosage: 3oz(85G) Sap

Euphorbia Tirucalli grows with single or multiple trunks which support a tangle of light green, pencil thick, succulent branches with little sign of a leaf. Pencil tree can reach a height of 20' to 30' with a 6' to 10' spread. The main trunk and branches are woody and brownish, but the younger branches are green and cylindrical, looking like so many pencils. The leaves are tiny and are shed early. What is usually called the flower is really a group of petal-like leaves. The true flowers, which are centered within these leaves, are inconspicuous.

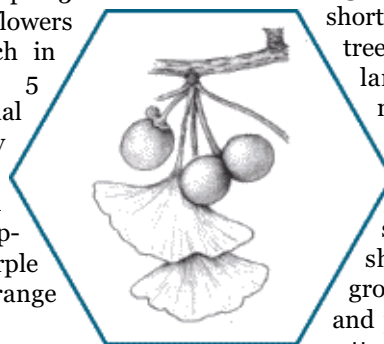
EUONYMUS ATROPURPUREUS

Common Names: Burningbush, Strawberry Bush, Wahoo

Poison: Evomonoside

Dosage: 3oz(85G) Bark, 2-3/10z(28G) Seed-Capsules

This shrub is a deciduous shrub with tough white wood, 4' to 6' high. Leaves are medium green and up to 3". The greenish-purple flowers are a third of an inch in diameter and have 5 petals, which is unusual for Euonymus (usually four-petaled). Throughout autumn the hard scarlet seed capsules open to reveal purple insides and bright orange seeds.



Ginkgo Biloba

GALANTHUS NIVALIS

Common Names: Fair-Maids-Of-February, Milk Flowers, Snowdrop, Snow White

Poison: Eycorine

Dosage: 3/3oz(85G) Bulbs

This dainty plant is one of the earliest blooming bulbs, often seen pushing up through the snow to bloom. The white, drooping, globular or bell-shaped 1" flowers have a dab of green on each petal. The green markings on the outside of the petals are found only on the tips. They are however variable, and can be yellow or absent in some forms. The plant produces clumps of slender, dark green leaves from 6" to 12" high. The narrow strap-like foliage is linear and similar to a mini trumpet daffodil.

GINKGO BILOBA

Common Names: Duck Feet Tree, Ginkgo, Maidenhair, Maidenhair Tree

Poison: Locamide

Dosage: 30-40/7oz(200G) Flowers, 30-40/7oz (200G) Leaves, 12-15/14oz (398G) Mature Fruit, 200-300/16oz (455G) Seeds, 10-20/7oz(200G) Stems

A Ginkgo tree can reach about 100' tall. Some trees are very wide spreading, others are narrow. Young trees have a central trunk, pyramidal in shape, with regular, lateral, ascending, asymmetrical branching and open growth. Older trees have an oval to upright spreading growth and sometimes irregular branching and tremendous sized limbs and trunk. When about 100 years old its canopy begins to widen. The male tree usually has a slim column form and is slightly longer, the female tree has a wider crown and a more spread out form. The Ginkgo has long and short branches growing at nearly right angles. A short branch may become a long branch and the tip of a long branch may change into a short branch. That's why older trees may have a more irregular form. The buds are mounded with distinct form and leaf scars. The leaves grow alternate on the long branches during spring. On the ends of short, lateral shoots they grow very slowly in clusters and produce a long shoot with scattered leaves after a number of years. The short shoots also pro-

EUPHORBIA MILII

Common Names: Crown-Of-Thorns, Dwarf Apache

Poison: Diterpinol

Dosage: 3oz(85G) Sap

A Euphorbia Milii is a low-growing evergreen shrub with very thorny grooved stems and branches. The stems

CHAPTER 6 - TOXIC PLANTS

duce the seeds and pollen. The stems are tan, light brown or gray, relatively smooth and are somewhat reflective in the winter sun. Some trees tend to have branches crossing the trunk. The fruit looks like somewhat like large cherries. It takes about 20-35 years before they appear for the first time in spring. as the fruit ripens it becomes yellowish, and plum like, consisting of a large nut the size of an almond with a fleshy outer layer. The seed has a silvery shine. The ripened fleshy seed coat when falling on the ground and decaying has an odor like rancid butter.

GLYCERIA GRANDIS

Common Names: Manna Grass, Manna Reed
Poison: Telouine
Dosage: 12-15/10z(28G) Leaves, 15-17/10z(28G) Stems

Glyceria Grandis is a tall grass with usually solitary erect stems growing to a height of about 3'. The leaf blades are very long and thin, with oval spikelet about an inch long. It also has 3-8 flesh-colored flowers. The seeds of this plant resemble wheat.

GLECHOMA HEDERACEA

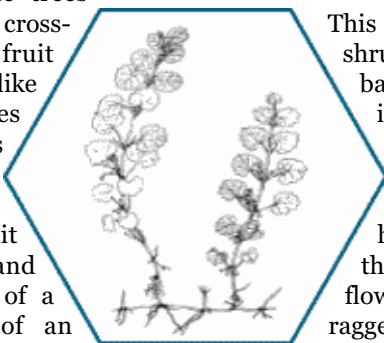
Common Names: Creeping Charlie, Gill-Over-The-Ground, Ground Ivy, Lamiaceae Mint
Poison: Baeceria
Dosage: 2/10z(28G) Leaves, 1-2/30z(85G) Stems

Glechoma Hederacea is creeping ground cover related to the mint family, making it a virulent weed that can grow abundantly in uncultivated damp or shaded ground around houses and garden areas. Acting as a vine it moves out from underneath trees and shrubs and creeps across the grass area rooting from the nodes as it travels. While it does have many tiny violet flowers, one of the better identification features is the rare scalloped edge of the round leaves.

GUTIERREZIA SAROTHRAE

Common Names: Broomweed, Broom Snakeweed, Matchweed, Turpentine-

Weed, Yellow Top
Poison: Saponin
Dosage: 2-4/10z(28G) Leaves



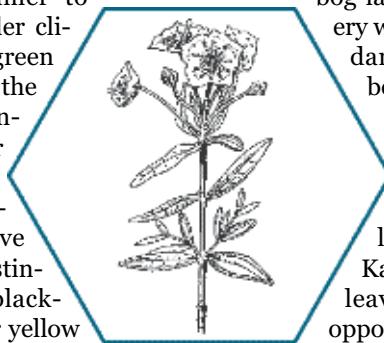
Clecoma Hederacea

This is an ugly plant that is shrubby or woody only at the base. The stems are branching, with linear leaves. There are several heads, usually in clusters at the ends of branches. A given head will have no more than 3 to 8 tiny flowers. The flowers are yellow and usually ragged. This plant often forms dense stands especially in over-grazed grasslands.

HELENIUM AUTUMNALE

Common Names: Dogtooth Daisy, Helen's Flower, Rotgold, Sneezeweed
Poison: Helenalin
Dosage: 30-35/4.5oz(128G) Leaves, 10-12/5.5oz(156G) Stems

Helenium Autumnale is a tall long-flowering perennial whose blooms appear in late summer to early autumn in cooler climates. The yellow-green disk at the center of the flowers is a distinguishing mark for Sneezeweed. On all Sneezeweeds, the yellow ray petals have three lobes. These distinguish them from black-eyed susan and other yellow coneflowers. Along streams, around ponds and lakes, roadside ditches, wet meadows, prairies and low woods. Despite the name Sneezeweed, Heleniums are not generally regarded as a significant problem unless eaten.



Kalmia Polifolia

KALANCHOE DAIGREMONTIANA

Common Names: Devil's-Backbone, Mother Of Thousands
Poison: Ontianin
Dosage: 10-11/.5oz(14G) Leaves, .5/10z(28G) Stem

Kalanchoe grows as a single tall stem with no branches about 2' to 3' tall, with opposite pairs of fleshy, triangular, tooth-edged, maroon or purple flecked green leaves. The tiny leaves develop into a tiny plant resembling the parent plant. These tiny plants grow between the teeth

and quite often form visible Root. The tiny plants root very readily when they come in contact with soil. The plant sometimes flowers on top with dull pink blossoms.

KALMIA POLIFOLIA

Common Names: Bog-Laurel, Bog Rosemary
Poison: Gyrienide
Dosage: 10-11/.5oz(14G) Leaves, .5/10z(28G) Stem

Found along bogs and acidic lake shores, this shrub usually grows 3'-5' tall and spreads by rooting branches. The leaves are lance-shaped, dark green and leathery above dense, short, white hairs below. The flowers grow in loose clusters at branch tips, rose-pink and have a saucer-like shape. Each tip is tucked into small pouch in the petal and held under tension(like a catapult). Bog-laurel is a short evergreen shrub that prefers sunny bogs. The showy pink flowers are saucer-shaped and bloom in clusters in May and June. Like bog-rosemary, the leaves of bog-laurel are evergreen and leathery with enrolled margins and are dark green above and white beneath. The easiest way to distinguish between non-flowering individuals of bog rosemary and bog laurel is in the arrangement of leaves on the branches. Kalmia Polifolia has alternate leaves while bog-laurel has opposite leaves.

KOCHIA SCOPARIA

Common Names: Belvedere, Summer-Cypress
Poison: Malacia
Dosage: 3-5/Flowers .5oz(14G), 3-5/.5oz(14G) Leaves, 12-15 Seeds

Kochia is an annual plant that reproduces from seeds and has a very deep taproot. The erect, much-branched stems are 3' to 7' long, smooth below but usually hairy above. The alternate, simple leaves are 1" to 2" long with hairy margins. The small green flowers lack petals and are found in clusters in the upper leaves and in terminal spikes. The brown flattened seeds are about 1/16" long and grooved on each side. Kochia is common in fields, pastures, rangelands, waste places, and along road sides.

CHAPTER 6 - TOXIC PLANTS

Summer-cypress is most often found in open, unshaded areas on disturbed sites.

LABURNUM ANAGYROIDES

Common Names: Golden-Chain, Goldregen

Poison: Cyrotine

Dosage: 4oz(113G) Bark, 5-7/.8(22G) Leaves, 10-15 Seeds

This tree grows limbs will produce dark green leaves and long chains of yellow flowers, along with clumps of orange flowers on twiggy branches, and fleshy-colored flowers on other longer branches. The seeds are borne in long, chain clusters of individual seed pods. This short tree is found in woods and open clearings.

LACTUCA SCARIOLA

Common Names: Prickly Lettuce, Wild Lettuce, Wild Opium

Poison: Lactine

Dosage: 4-8/1oz(28G) Shoots

This is a bright-green plant, from 2' to 7' high, covered with a whitish bloom. It has an erect, rigid stem sometimes smooth throughout but at times hairy at the base, with numerous clasping, oblong lance-shaped leaves with finely toothed margins and spiny bristles along the under side of the rib. The lower leaves are at times 10" long and 3" wide, but the upper ones are much smaller. The pale yellow flowers, which appear in the early autumn, occur in very numerous heads. They have the feathery appearance of a ripe dandelion bloom, arranged in open clusters, each head consisting of 6 to 12 flowers.

LATHYRUS SATIVUS

Common Names: Chickling Pea, Chickling Vetch, Grass Pea

Poison: Bakantin

Dosage: 16lbs(7.25KG) Mature Peas

Sky blue flowers are borne numerous on a bushy type of crawling vine that grows 2' to 3' tall. It grows easily in heat as well as along coastal beaches. In late spring the flowers produce 1 to 2 pea pods containing 8 to 10 peas. The peas and pods are quite delicious.

LINARIA VULGARIS

Common Names: Butter And Eggs, Wild Snapdragon, Yellow Toadflax

Poison: Antirrinocide

Dosage: 3/.5oz(14G) Leaves

Linaria has a direct stem that grows up to 5' high. Leaves are located on a stem densely bunched on the top. The flowers are light yellow outside and are orange inside. There is a direct spur below. Flowering takes place in summer. The fruits ripen in late fall. The yellow and orange of this plant are a common sight in vacant lots, along road sides, and occasionally in mountain meadows. Linaria Vulgaris is considered a noxious weed, one which is non-native and crowds out native species.

LOBELIA SIPHILITICA

Common Names: Blue Cardinal flower, Great Blue Lobelia

Poison: Lobeline

Dosage: 3/.5oz(14G) Leaves

This plant can be found growing in marshes and wet forests. The leaves can reach 4" in length and have a toothed edge. The flowers are irregular in shape and are a striking shade of blue. Blooms first appear in mid summer and continue into early fall. The flowers are large and have stripes on the tube portion.

LONICERA XYLOSTEUM

Common Names: Emerald Mound Honeysuckle, Fly Honeysuckle, Fly Woodbine

Poison: Frohnlide

Dosage: 2/.25oz(14G) Mature Berries

Fly honeysuckle is a loosely branched or straggling shrub. The leaves are oval shaped, thin, and a bright pale green. The flowers grow in drooping pairs from long, slender stalks. They are a lovely greenish-yellow and funnel-shaped. These flowers become pairs of red berries that ripen at the beginning of summer.

LUPINUS BURKEI

Common Names: Burke's Lupine

Poison: Anagyriine

Dosage: 1oz(28G) Sap

This stout lupine is rare, but can be found in bogs. The leaves are composed of several individual leaflets joined at a central point. This arrangement is called a palmate (resembling the outstretched fingers of the hand). This leaf can be as big as a dinner plate. Only after the flowers have died do the Sap become toxic.

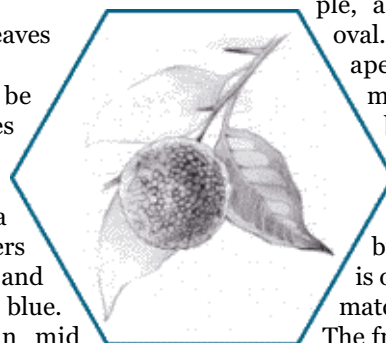
MACLURA POMIFERA

Common Names: Bodock, Bois D'Arc, Bow-Wood, Hedge Osage, Horse-Apple, Osage Apple, Osage Orange, Wild Orange, Yellow Wood

Poison: Ukonine

Dosage: .25oz(7G) Sap

The leaves of the Maclura are simple, alternate, deciduous and oval. They have a long pointed apex and exude the toxic milky sap when cut. Its branches are gray, grow in a zigzag, armed with spines, and with raised leaf scars and sunken buds. The distinctive bark is orange-brown and ridged, matching its flowers in color. The fruit is a large ball of puffy seeds that resemble broccoli or "green brains".



Maclura Pomifera

MANIHOT ESCULENTA

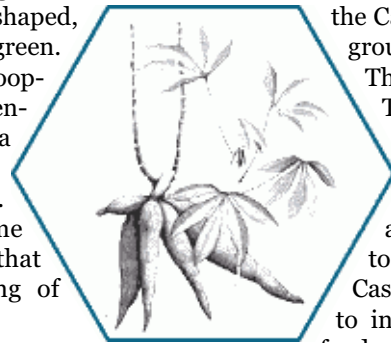
Common Names: Cassava Plant, Manioc, Tapioca, Tapioca Plant

Poison: Cyanide (Organic)

Dosage: .05/1oz(29G) Root

Cassava is a 5' to 9' tall perennial with thin stems that hold large, long-stemmed leaves. The tall stem of the Cassava divides, near to the ground, into multiple stems. The foliage is not very dense. The roots can be 3' and 9" in diameter. Cassava roots could be compared to a very large potato, but are processed before eaten to remove the poison. A raw Cassava is naturally resistant to insects and is an essential food crop for Africa, Asia, and South America.

In folk medicine, the Cassava plant is used for the treatment of abscesses,



Manihot Esculenta

CHAPTER 6 - TOXIC PLANTS

snakebites, boils, diarrhea, dysentery, flu, hernia, inflammation, conjunctivitis, sores, cancer and tumors. The root of Cassava are made into a poultice and applied directly to the skin to alleviate sores. The leaf, root, and flour obtained from the plant can also be used in a wash that is applied to the skin.

MENISPERMUM CANADENSE

Common Names: Moonseed, Yellow Pirila, Yellow Sasparilla

Poison: Acutumine

Dosage: 3-6 Berries

Canadense is a woody twining vine that grows to up 12' long. It has large broad leaves are 8" and have a dark red-brown color that becomes green at the tips. Throughout summer and autumn the vine produces dozens of small, numerous, greenish, flowerlets. At the end of autumn these flowers produce little grape-like fruit in clusters, bluish black with a crescent moon-shaped pit. This plant is usually found at the margins of openings in forests, often near streams. The plant and fruit loosely resemble grapes, and are often eaten by travelers.

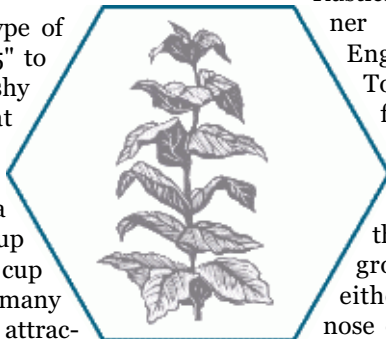
NARCISSUS POETICUS

Common Names: Narcissus, Pheasant's Eye, Poet's Narcissus

Poison: Nycoride

Dosage: 1/3oz(85G) Bulb, 3-4/1oz(28G) Flowers, 3-4/1.5oz(42G) Leaves, 3oz(85G) Pollen

A narcissus is a type of daffodil that rises to 15" to 17" tall on a light, fleshy stem and leaves that grow from the bulb. It features a flower with white petals and a small, golden yellow cup rimmed with red. This cup makes it unique from many other flowers and very attractive to the eye. The flowers are spicy and have a cloying fragrance. The perfume of this flower is potent stuff, constant exposure will cause lightheadedness and will eventually induce sleep.



Nicotiana Tabacum

NERIUM OLEANDER

Common Names: Carnival, Oleander

Poison: Oleandrin

Dosage: .5/.25oz(14G) Flower, 1/.25oz

(14G) Leaf, 1/.25oz(14G) Stem, 3-4/.25oz(14G) Young Shoots

This fast growing evergreen shrub can reach up to 20' tall. It forms a rounded mound to about 10' wide. It is a tough plant with daffodil-like summertime flowers in white, red, pink, salmon and light yellow. Leaves range from about 4" to 10" long, depending on variety and are a bright green. Oleander is found growing in dry, warm areas with rich soil, but will grow in warm humid climates.

NICOTIANA TABACUM

Common Names: Cavendish, Cheroot, Cigar, Cigarette, Fag, Negro Head, Quid, Segar, Snuff, Stogy, Tobacco

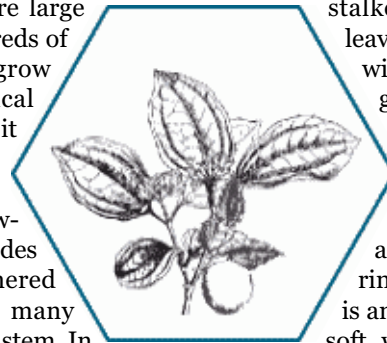
Poison: Nicotine

Dosage: .3/1.5oz(42G) Leaf, 1-2/.5oz(14G) Stems

Nicotiana leaves are large and simple, with hundreds of sticky hairs. They grow from a fleshy tropical stalk. In late summer it produces large, soft, paddle-shaped flowers. The upward-facing flowers come in various shades of pink and are gathered more tightly than in many species at the top of the stem. In mid-autumn it produces a capsule with dozens of minute seeds.

Originally, Native Americans in the eastern United States grew Nicotiana Rustica, which was the forerunner of Tobacco introduced in England and Portugal. Tobacco is believed to be first used by the natives for medicinal purposes by shamans or medicine men. In the early use of the plant the leaves were ground up or grated and either snorted through the nose or placed between the lip and gums and sucked. The use of tobacco was performed by men and women as a way to relax after a meal or as a medicinal agent for headaches. It was not until later that it was smoked. Nicotiana Tabacum, or Smoking Tobacco, was introduced to the Spanish by Native Mexican and South Americans.

The early 18th Century was the so-



Nux Vomica

called "Age of Snuff." Tobacco from North Carolina was used primarily for snuff and pipe smoking. In the 1840's, Spanish cigarettes made with weaker tobacco for women had become popular with the French, and cigarettes caught on in New York as well. By the 1950's, 1 of 2 adults smoked cigarettes.

NUX VOMICA

Common Names: Poison Nut, Quaker Buttons

Poison: Strychnine

Dosage: 2-4 Seeds

Nux Vomica is a medium-sized tree with a short, crooked, thick trunk. The wood is white hard, close grained and the root very bitter. Branches are irregular, being covered with a smooth ash-colored bark. Young shoots are a deep green, shiny with opposite, short stalked, oval, shiny, smooth leaves about 4" long and 3" wide. It's flowers are small, green-white, funnel shape, blooming in the cold season and having a disagreeable smell. Fruit about the size of a large apple with a smooth hard rind or shell which when ripe is an orange color, filled with a soft white jelly-like pulp containing five seeds covered with a soft woolly-like substance, white and horny internally. The seeds have the shape of flattened disks densely covered with satiny hairs. They are very hard, with no odor but a very bitter taste.

The muscular contractions caused by strychnine produce characteristic contortions of the body, arched backwards so that only the heels and the top of the head touch the ground, and of the face, a fixed grin known as the risus sardonicus.

OXYTROPIS SERICEA

Common Names: Locoweed, Silky Crazyweed, White Locoweed

Poison: Locamine

Dosage: 3/.2oz(5G) Flowers, 2/.2oz(5G) Leaves, 5-7 Pods, 25-35 Seeds

Oxytropis Sericea is a native, perennial that grows from 6" to 12" tall. Its dark green leaves are 1" to 8" long. One plant may have many flowering stalks,

CHAPTER 6 - TOXIC PLANTS

each with 6 to 27 flowers the produce many legume-like seeds in the fall. These legumes are erect and oblong, having a dry brown color speckled with black.

PAPAVER RHOEAS

Common Names: Corn Poppy, Field Poppy, Shirley Poppy

Poison: Opium

Dosage: .2oz(5G) Sap

Papaver Rhoëas are often found on arable land, road sides, gravel pits and waste places. The corn poppy produces large red flowers. The stalks are distinctive because of the coarse, spreading hairs. The leaves are stalkless with coarsely toothed lobes. The large solitary poppy-like flowers with bright red petals are produced during the summer. The seed capsule is hairless and more or less globular, often with a whitish bloom.

PAPAVER SOMNIFERUM

Common Names: Herb Of Joy, Mawseed, Mohn, Opium Poppy, White Poppy

Poison: Opium

Dosage: 2oz(56G) Sap

The Papaver Somniferum is an annual herb that 3' to 5' tall with wide many-petaled flowers. This plant produces copious amounts of a viscous sap. Opium poppy has been cultivated for several thousand years and many cultivations have resulted, differing in flower color, opium production, color of seeds, oil content of seeds, and cultural requirements. Many variants are named, the best known are the "White Poppy" and the "Black Poppy", named for color of seed. "White Poppy" has white to silvery-gray flowers, white seeds, and the capsule is somewhat flattened both at top and bottom. "Black Poppy" usually has violet flowers, with seeds being a slate color, and the seed capsule is smaller and more globular.

The fluids of this plant cause a euphoric calmness in small amounts and are highly addictive. When opiates are cheap, addicts generally eat them, sniff them, or smoke them. When the drug cost is high, the same effects are achieved by injecting smaller amounts subcutaneously "skin-popping" or intra-



Papaver Somniferum

venously "mainlining". Such injections, often carried out with crude and unsterile implements, and can contribute to the risk of infectious disease among addicts. Assassins are often aware if a target is an addict and will use it to their advantage.

PHYSALIS PERUVIANA

Common Names: Goldenberry, Golden Husk, Groundcherry, Strawberry Tomato, Winter Cherry

Poison: Oranine

Dosage: 2-4 Berries

This soft-wooded plant usually reaches 2' to 3' in height but occasionally may attain 6'. It has ribbed, often purplish, spreading branches, and nearly opposite, velvety, heart-shaped, pointed, randomly-toothed leaves and bell-shaped, nodding yellow flowers with 5 dark purple-brown spots in the throat, and cupped by purplish-green, hairy, 5-pointed petals. After the flower falls the stem forms a straw-colored husk much larger than the fruit it encloses. The berry is smooth, glossy, orange-yellow with a juicy pulp containing numerous very small yellowish seeds. When fully ripe, the fruit is sweet but with a pleasing grape-like tang, but The husk is bitter and inedible.

PHYTOLACCA ERICANA

Common Names: Poke, Pokeweed, Pokeberry, Inkberry, Pigeonberry

Poison: Phytolagen

Dosage: 30-35 Berries, 28-30/8oz(227G) Leaves, 1/3oz(85G) Root, 36-40/8oz(227G) Stems, 36-40/8oz(227G) Young Shoots

Phytolacca Ericana is a large, smooth, branching herb that grows from a large, perennial root, with green, red, or purple stems. Its leaves are alternate and simple, its flowers white, on a long stem, more or less erect. In early summer it produces fruit, a dark purple berry composed of 5 to 12 segments fused in a ring with a drooping stem. It is

fairly common, growing in forests or natural areas, in fields, fence rows, clearings, and road sides.

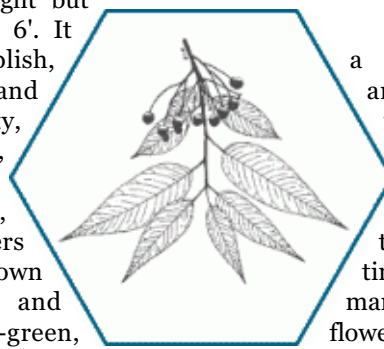
Poke is well know among country folk as a tasty cooked green. Tender young shoots are gathered and boiled twice, discarding the first water to rid the leaves of any possible poison.

PRUNUS PENNSYLVANICA

Common Names: Bird Cherry, Fire Cherry, Pigeon Cherry, Pin Cherry, Wild Red Cherry

Poison: Prunasin

Dosage: 3-4/.5oz(14G) Leaves, 1 Stone(Crushed)



Prunus Pensylvanica

Prunus Pensylvanica is a colonizer of disturbed areas, having finely toothed alternate leaves, oval and elongated with a pointed tip. The bark on the trunk is reddish to dark brown with distinctive horizontal pinkish markings. White five-petaled flowers on long stalks open in early summer, followed by edible red berries later in the summer.

PRUNUS PERSICA

Common Names: Momo, Peach, Pecher

Poison: Cyanide

Dosage: 50-70 Stones

The Prunus Persica tree is dwarf, slender and willowy, with alternate, slender, pointed leaves. It bears pink, 5-petaled flowers on bare branches in late winter and fruits heavily in the spring. The fruit is oval with a protruding knob at the apex, 2.75" long and 2" wide. This fruit is velvety, green with a deep-red blush when ripe. The flesh is mainly white but a rich strawberry-red in the center. It is tender, juicy, and of excellent, sweet-acid flavor having a slight suggestion of bitter-almond and completely safe to eat. The toxic stone-hard pit is free, corrugated and very hard. It is small in proportion to the size of the fruit, looking somewhat like an almond.

PRUNUS VIRGINIANA

Common Names: Red Chokecherry, Wild Cherry

Poison: Amygdalin

CHAPTER 6 - TOXIC PLANTS

Dosage: 50-70 Stones

Prunus Virginiana is a thicket-forming erect shrub or small tree. Its stems are numerous and slender, branching from the base or with main branches upright and spreading, producing leaves that open green, then Round red as they mature. Heights vary considerably according to variety and site quality, ranging from 3' to 19'. Perfect white flowers are borne on leafy twigs during the summer, becoming small cherry-like berries. The cherries each contain a small stone. The Chokecherry prefers to grow in sunny fields and open valleys.

PTERIDIUM AQUILINUM

Common Names: Bracken, Brake, Brake Fern, Eagle Fern, Fiddlehead, Hog Brake, Pasture Brake

Poison: Cyanide

Dosage: 3-4/.5oz(14G) Leaves

Bracken is a large, coarse fern that has almost horizontal leaves and can grow 1' to 6' tall (sometimes up to 10'). Unlike more typical broadleaf ferns, this primitive plant lacks true stems. Each leaf arises directly from a horizontal underground stem, and is supported on a rigid leaf stalk. In addition, bracken does not produce flowers or seeds. Instead a continuous line of spore cases form along the underside edge of leaves and are difficult to see. Spore cases produce minute, brown spores. The leaves are least potent at the end of autumn.

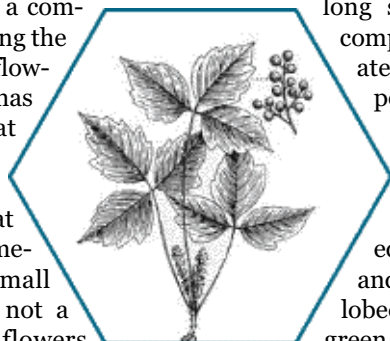
RANUNCULUS BULBOSUS

Common Names: Bulbous Buttercup, Crowfoot, St Anthony's Turnip, Frogsfoot, Goldcup, Jaunet

Poison: Ranunculin

Dosage: .2oz(5G) Sap

The *Ranunculus* is a common field flower, covering the meadows with yellow flowers in May. This plant has a bulb-like swelling at the base of the stem, roundish and white, flattened a little both at the top and bottom, somewhat resembling a small turnip. It is however, not a true bulb. After the flowers



Rhus Radicans

have died, the juices become toxic. Because the buttercup juices possess the

property of inflaming and blistering the skin, beggars often use it to keep open sores for sympathy.

RHAMNUS FRANGULA

Common Names: Alder Buckthorn, Fernleaf Buckthorn, Glossy Buckthorn, Tallhedge Buckthorn

Poison: Quinone

Dosage: 4oz(113G)Bark, 20-23 Berries

This erect shrub which grows up to 6m tall, has long upright branches with shiny brown bark and pronounced light tentacles. There are no thorns. The dark green, entirely smooth leaves turn yellow or red in autumn. The small, greenish-white flowers arise from leaf barrettes in the upper branches and give way to globular berries, green turning to red and finally glossy black. *Rhamnus* forms dense undergrowth along with alder, spindle tree and guilder rose in damp woodland, hedge rows, marshes and swamps. *Rhamnus* prefers acidic and light sand or peaty soils.

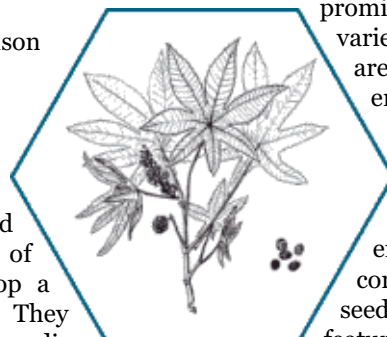
RHUS RADICANS

Common Names: Poison Ivy, Poison Oak

Poison: Urushiol

Dosage: 1oz(28G)Oil

Poison ivy stems are woody, brown, and smooth, older stems of climbing plants develop a very hairy appearance. They trail along the ground, sending frequent branches both out and up. They may grow upright, in a shrub form, which can reach 7' in height, or they may grow as a vine, up to 5" in diameter, climbing trees and fences by means of dense, dark, fibrous, aerial Root. The alternate leaves have rather long stalks and are palmated compound. The leaflets radiate outward from a center point, like the fingers of the hand. The three leaflets, around 2" to 4" in length, may be shiny or not, are generally wavy-edged or slightly toothed, and are sometimes slightly lobed. The young leaves are green, often with a reddish cast that they lose as they mature. In late spring to early summer, the flowers



Ricinus Communis

appear, in loose clusters from the leaf buds. The flowers have five petals, are about 1/8" diameter, are off-white with a yellowish or greenish tinge, and develop into small, round, dry, off-white fruits with a yellowish or greenish tinge. The fruit ripens in late summer through late fall, and at about the same time the leaves turn bright red. It is particularly common around lakes, swamps, and rivers. It will grow perfectly well, however, in a wide variety of other habitats. It's also common along road sides and trails, in areas of waste ground, in thickets, in open woods, and in old fields. It seems to do best in places that are just slightly shaded.

RICINUS COMMUNIS

Common Names: Castor Bean, Mamona, Ricino

Poison: Ricin

Dosage: 2-4 Seeds

This tropical plant has stalked leaves that consist of eight radiating, pointed leaflets with slightly serrated edges and prominent central veins. Many varieties are green, but some are reddish brown. The flowers are green and inconspicuous in most varieties, but a few are pigmented pink or red. Castor bean fruit is covered with soft spines and contain attractively mottled seeds, these being distinctive features of the plant.

If the seed is swallowed without chewing, and there is no damage to the seed coat, it will pass harmlessly through the digestive tract. However, if it is chewed or crushed and swallowed, the toxin will be absorbed by the intestines.

ROBINIA PSEUDOACACIA

Common Names: Black Locust, Green Locust, Shipmast Locust, Yellow Locust

Poison: Calodine

Dosage: 1oz(28G)Bark, 2/.2oz (5G) Leaves, 3-4 Seed Pods

As Black Locust trees mature, the dark bark becomes marked with deep furrows and rounded ridges. The tree grows best in rich, moist soils of bottom lands and along streams, but also does well on waste land and on drier slopes.

CHAPTER 6 - TOXIC PLANTS

The hard, strong wood is very durable when in contact with the soil. It has been used extensively for mine props, railroad ties, and fence posts. This tree can also be found around older farms and houses and is also found along fence rows. Black locust bears abundant white flowers in late spring. Seeds ripen and are dispersed by gravity during the subsequent fall and winter.

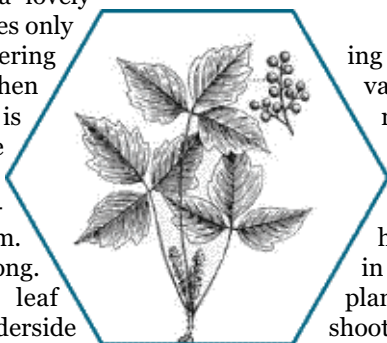
SANGUINARIA CANADENSIS

Common Names: Blood Root, Racoon Root, Red Pucoon, Red Root, Snakebite. Sweet Slumber, Tetterwort

Poison: Sanguinarine

Dosage: .1oz(2G) Root

Sanguinaria is one of the earliest spring flowers. It has a lovely white flower and produces only a single leaf and a flowering scape about 6" high. When the leaf first appears it is wrapped round the flower bud and is a grayish-green color covered with a downy bloom. The leaf is 6" to 10" long. After flowering, the leaf increases in size, the underside paler showing prominent veins. The white flower is wax-like with golden stamens. The seed is an oblong narrow pod about 1" long. The rootstock is thick, round and fleshy, slightly curved at ends, and contains an orange-red juice, and is about 1" to 4" long, with orange-red roots.



Sanguinaria Canadensis

SARCOBATUS VERMICULATUS

Common Names: Greasewood

Poison: Xolate

Dosage: 12-15/1oz(28G) Leaves

Greasewood is a tough woody shrub with sharp spines growing on its many branches and smooth, white bark. Root can extend 20' to 57' below the soil surface. Leaves of the greasewood are simple, linear, alternate, and fleshy. Its flowers are also like spikes, but larger, resembling small pine cones. After the flowers have died, they form small, dry pods winged at the middle. The pods contain small brown seeds. This plant only grows in dry, saline flats.

SENECIO VULGARIS

Common Names: Common Groundsel

Poison: Senecionine

Dosage: 30-32/1oz(28G) Leaves

Groundsel is a common weed in disturbed ground such as gardens and road sides. The stems are leafy, erect and the yellow leaves are deeply and irregularly toothed. The yellow flowers cluster at the ends of stems and have a white 'puff-ball' seed head like that of dandelion.

SOLANUM DULCAMARA

Common Names: Bittersweet, Climbing Nightshade, Deadly Nightshade, Felonwood, Mad Dog Berries, Violet Bloom

Poison: Belladonna

Dosage: 4-5 Berries, 8-12/1oz(28G) Leaves

This perennial climbing half-bush can be met in various humid places: in riverside thickets of bushes, on wood bogs, along ditches, on humid meadows. Branches are hollow, and grow up to 9' in length. For climbing this plant uses acute, hooked side shoots. Leaves are alternate, lanceolate, with two little blades at the foot of petiole. Flowers are violet with yellow, conically joined stamens. They are assembled in drooped curled bunches. Flowering takes place during the summer. The fruits (oval berries) appear after that. At first the berries are green, and with ripeness become red. The ripe berry's taste at first is sweet and then becomes bitter.

Solanum Nigrum

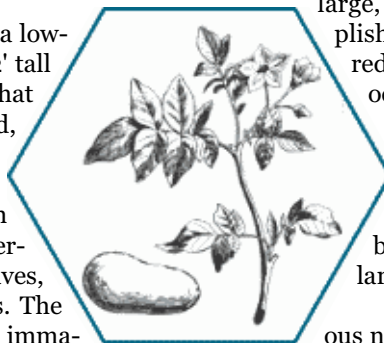
SOLANUM NIGRUM

Common Names: Black Nightshade, Common Nightshade, Murderweed

Poison: Belladonna

Dosage: 4-5 Berries

Black Nightshade is a low-branching annual, 1' to 2' tall with triangular stems that bear oval, thin-textured, alternate leaves with wavy margins. The tiny white flowers, borne in drooping clusters on lateral stalks between the leaves, resemble tomato flowers. The berry fruit is green when immature, purplish-black when ripe.



Solanum Tuberosum

SOLANUM TUBEROSUM

Common Names: Potato, White Potato

Poison: Belladonna

Dosage: 1 Berry, 1-2 Immature Potatoes, 5-8/1oz(28G) Leaves, 12-15/3oz(85G) Stems

The potato plant has a short life span ranging from 80 to 150 days from sprouting to maturity, with differences existing between varieties. When grown from "seed pieces" several shoots arise from one seed piece. The growth of the stem is erect in early stages, reaching 2' to 5' feet in height. As the plant matures, the stem weakens and lies prostrate, eventually yellowing and dying back at the end of the growing season. Leaving patterns are alternate, with 7-9 oval leaflets and one terminal leaf. Often many smaller secondary leaflets are found growing between the primary leaves. Flower color can range from creamy white to yellow, pink, purple, or striped. The fruit is a berry with seeds in a mucilaginous pulp. The berries are small and green, resembling a small tomato. Seeds are flattened and ovate, with up to 300 seeds per fruit.

The potato is in the same family as nightshade, and though the mature potato is edible, the remainder of the plant is as dangerous as a true nightshade.

SORGHUM HALEPENSE

Common Names: Johnsongrass

Poison: Prussic Acid

Dosage: 25-30/1oz(28G) Leaves, 12-13/1oz(28G) Stems

Johnson grass is a tall, coarse, grass with stout root. It grows in dense clumps or nearly solid stands and can reach 8' in height. Leaves are smooth, long, and have a white base. Stems are pink to rusty red near the base. Flowers are large, loosely branched, purplish, and hairy. Seeds are reddish-brown. This species occurs in crop fields, pastures, abandoned fields, forest edges, and along stream banks. It thrives in open, disturbed, rich, bottom ground, particularly in cultivated fields.

Johnsongrass is a serious noxious weed. It is considered by scientists to be one of

CHAPTER 6 - TOXIC PLANTS

the ten worst weeds in the World. Several States and Counties in the U.S. have passed ordinances establishing penalties against landowners who knowingly allow Johnsongrass to grow and spread on their property.

SYMPHORICARPOS OCCIDENTALIS

Common Names: Snowberry, Snow White

Poison: Chelidonium

Dosage: 6-8 Berries

This is an erect shrub, 2' to 4' tall. It grows many slender branches with reddish brown, shredded bark. The leaves are thin and oval, usually 2" to 4" long. The beautiful pink-white flowers are small, dense, and cluster at the branch tips. They have a fat bell-shape and have a hairy inside. The berries are white, waxy, oval to round and hang in drupes, about 5" long with 2 seeds. It often forms thickets from suckers in open woods, thickets, and valley slopes, being most abundant in dry areas.

SYMPHYTUM OFFICINALE

Common Names: Common Comfrey, Consoude, Consuelda

Poison: Heliosupine

Dosage: 9-10/10z(28G) Leaves, 1/2oz(56G) Root

The *Symphytum* rootstock is black outside, fleshy and whitish inside, and contains a glutinous juice. The angular, hairy stem bears bristly, oblong leaves. There are also tongue-shaped leaves that generally lie on the ground. The whitish or pale purple flowers have a tubular corolla resembling the finger of a glove and grow in forks from Spring until the first frost. Each flower is followed by four seeds in a little cup-like fruit.

SYMPLOCARPUS FOETIDUS

Common Names: Meadow Cabbage, Skunk Collard, Skunk Cabbage, Skunkweed, Stinking Poke, Swamp Cabbage

Poison: Conubide

Dosage: 5-6/10z(28G) Leaves, 1/2oz(56G) Root

The flowers, which bloom late winter, early spring and appearing even before the leaves, are tiny, perfect, ill-smelling, greenish-yellow to purplish-brown florets thickly scattered over a rounded, fleshy pod. This pod is hidden within a purplish-brown to greenish-yellow, usually mottled cup of leaves in the shape of a hood. The leaves are large, broadly ovate, often a foot across, with petioles slightly grooved, resembling a cabbage or lettuce.

THERMOPSIS RHOMBIFOLIA

Common Names: Buffalo Pea, Golden Bean, Goldenpea

Poison: Thermopsine

Dosage: 3-4 Bean, 18-24 Seeds

This wild flower gives showy, bright yellow blooms in late spring. These are often found in large patches, together they present a blaze of yellow on the prairie. Its common name, Golden Bean, is drawn from the dangerous plant's distinctive yellow seed pods.

TRIFOLIUM PRATENSE

Common Names: Cow Clover, Meadow Honeysuckle, Purple Clover, Red Clover, Sweet Clover

Poison: Isoflavide

Dosage: 15lbs(6.8KG) Plant Material

The plant consists of 3 leaflets growing from a tiny stem, very low to the ground. Leaves are usually hairy on both surfaces or sometimes without hairs above and hairy beneath. Each leaf has a light green or white 'V-shaped' marking. Flowers occur in round to oval heads usually on flower stalks less than an inch long, but also without flower stalks. Individual flower heads are pink to red in color and 1/2" to 1 1/4" in length. The fruit is a tiny green legume. The plant is found growing on rolling hills, forest clearings, pastures and meadows.

TRIGLOCHIN MARITIMA

Common Names: Bog-Grass, Ocean Arrow-Grass

Poison: Taxiphillin

Dosage: 38-40/6oz (170G) Flowers, 42-45/6oz(170G) Leaves

Triglochin Maritima has long flower stalks, up to 3' tall. Leaves grow in a bunch at the base, and are somewhat grass-like, but fleshy and round. There is also a semi-circular indentation extending the length of the blade on one side. The flowers are small, green, and densely attached along upper half of flower stalks, giving stalks a knobby appearance. Fruits are 6-part, roundish pods, each segment containing one seed. These pods cluster tightly along stalk. This plant grows in rainy meadows, damp areas, marshes, and sea sides.

THLASPI ARVENSE

Common Names: Stinkweed, Wormwood

Poison: Osinol

Dosage: 12-15/10z(28G) Leaves

Thlaspi Arvense is an annual weed in the Mustard family. It is a prolific seed producer, common in fields, gardens and new lawns. Over wintered stinkweed develops rapidly in spring, often flowering before fields are dry and competing with crops for moisture and nutrients. It grows as a rosette initially, later with branched, erect stems up to 24". The leaves have a few pointy teeth, smooth on the top surface with hairs sometimes present on the undersides, and are in an alternate arrangement on the stem. Small, white, 4-petal flowers cluster at the ends of stems and branches. Stinkweed's seed pods are circular to oval, with notched tips. As its name suggests, it is most easily identified by crushing some leaves. Stinkweed will emit a strong, rancid mustard-like odor.

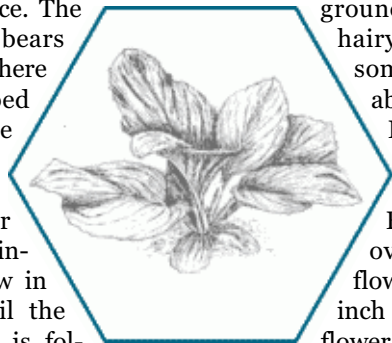
URTICA DIOICA

Common Names: Hoary Nettle, Stinging Nettle

Poison: Acetylcholine

Dosage: 1/.10z(2G) Sting

Urtica are one of the first forest floor plants to appear in the spring, sprouting up from under last fall's dead leaf litter. Each of its leaves are about 5" long, roughly heart-shaped (rounded at one end and taper to a point at the other) and have large teeth around the leaf edge. They also have tiny hollow hairs on the main stem, leaf stems and on veins on both upper and lower sides of the leaves. In mid-spring, greenish clusters of tiny flowers hang down from the joint of the



Symlocarpus foetidus

CHAPTER 6 - TOXIC PLANTS

leaf stem and main plant stem. At this point, they have reached their full size of up to 9' tall. Flowers later develop into seeds which are blown off the parent plant and grow nearby. Stinging nettle also spread using underground tubers that shoot out to the side.

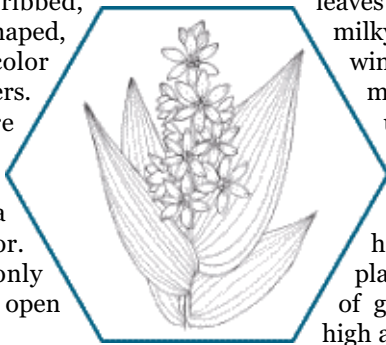
VERATRUM VIRIDE

Common Names: False Hellebore, Hellebore Poke

Poison: Jervine

Dosage: 1/.4oz(11G) Root, 7-10/.9oz(25G) Young Shoots

A plant with simple robust stems, 1' to 6' tall, leafy and hairy throughout. It has large, broad leaves, oblong, pointed at tip and clasping at the base. It's flowers are prominently ribbed, hairy underside star shaped, and a yellow-green color with dark green centers. These flowers are numerous in thin, branched drooping tassels that have a noticeable musky odor. This plant is commonly found in wet thickets, open forests and meadows.



Veratrum Viride

VIBURNUM OPULUS

Common Names: Flat Seed Berry, Guilder-Rose, Highbush Cranberry

Poison: Locane

Dosage: 12-15 Berries

The Viburnum is a 3' evergreen shrub. This plant flowers in spring, these fragrant flowers range from white and cream to pink-flushed or wholly pink. In late summer or fall the shrub bears ornamental fruits. They are usually spherical and may be blue, or black. The mature berries are edible but acidic and best suited for preparation of jellies or preserves. This plant grows in mostly rainy forests and valleys.

VICIA VILLOSA

Common Names: Bone Vetch, Fodder Vetch, Hairy Vetch, Luddvicker, Winter Vetch

Poison: Inosae

Dosage: 4/1oz(28G) Leaves, 6-8 Seeds

Hairy Vetch is a sprawling, climbing vine-like plant. with broad, dense leaves. The 6 to 8 pairs of narrowly oblong to

linear leaflets end in tendrils for climbing. From spring through early autumn the vine produces clusters of tiny corolla blue-purple trumpet flowers. There are typically 8 to 40 flowers that are all on the same side of the stem. This vine prefers waste ground, disturbed sites, road sides, and untended graveyards.

VINCA MINOR

Common Names: Myrtle, Myrtle Run, Periwinkle, Running Myrtle

Poison: Vincristine

Dosage: 4/1oz(28G)

The Common Periwinkle is a ground covering plant. It usually grows between 3" to 6" high. It has dark evergreen leaves that are 1" to 2" long. When the leaves are broken, it releases a milky sap. The common periwinkle shows flowers all summer long. These flowers are usually pale pink, white, hot pink, or purple. This plant has a shallow root system and is very easy to harvest. This plant is often planted in cemeteries in place of grass, as it only grows so high and easy to maintain.

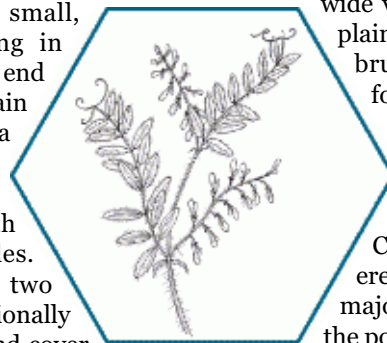
XANTHIUM STRUMARIUM

Common Names: Clotbur, Cocklebur

Poison: Tyloside

Dosage: 1-3 Seeds, 10-12 Seedlings

Common cocklebur is broad leaved and tap rooted. Stems are erect, ridged, rough and hairy, and frequently branched, resulting in somewhat bushy plants. It has small, green flowers occurring in separate clusters at the end of the branches and main stem. The fruit is a brown, hard, woody bur from half an inch long and covered with stout, hooked prickles. Each fruit contains two seeds. Cocklebur occasionally forms a dominant ground cover in open woodlands, stream beds, and beaches.



Vicia Villosa

ZIGADENUS ELEGANS

Common Names: Camus Lilly, Elegant Camas, Mountain Death Camas, White Camas

Poison: Zygacine

Dosage: 1/2.5oz(71G) Bulb, 20-23/1.8oz(51G) Flowers, 14-16/1oz(28G) Leaves

The Elegant Camas blooms, sometimes in great numbers, in moist mountain meadows, appearing in midsummer following snow-melt, often in company with other moisture loving wild flowers. The Zigadenus appears in early to mid-spring at lower elevations. One or several stems emerge from a leafy base, topped by a cluster of small, white, six-petaled flowers. Several flowers are found on each stemlette. Poisoning is most common in early spring because this plant often appears growing before other plant life.

Most Camas plants were first collected by the Lewis and Clark expedition in 1806.

ZIGADENUS VENENOSUS

Common Names: Death Camas, Meadow Death

Poison: Zygacine

Dosage: .15/.09oz(25G) Bulb

Death Camas is a hardy wild flower that bears a resemblance to an edible prairie plant, the Prairie Onion(*Allium textile*) which also blooms at the same time in the wild, early summer. It grows from 8" to 24" in height. Leaves are grasslike, and usually shorter than the flower stalk. They have six petaled, star-shaped blooms in shades of white, yellow, and green. Root are short and sparse. The small seeds are contained in three-celled pods. Death Camas has a wide variation of habitats from plains, grassy foothills, sagebrush slopes to mountain forests and alpine meadows. This highly poisonous plant is a staple of the assassin's pack.

The roots of edible Camas plants were gathered by native peoples as a major source of food. After the poisonous Death Camas has finished blooming, the plant and root look like Camas. While in bloom, natives dug up the Death Camas plants for safety.

CHAPTER 6 - TOXIC PLANTS

ABRIN

Dosage: (2mg)

DC: 11

Onset: 2D4 Hours

Duration: 2D2 Days

Symptoms: Cough, Diarrhea, Fever, Nausea/Vomiting, Pain(Abdominal), Sweating

Damage: Asphyxiation 3D20+10 +2D6 Per Round

Save: Reduce Damage By 25%, Reduce Duration By 50%

ACETYLCHOLINE

Dosage: (112mg)

DC: 11

Onset: 2D6 Rounds

Duration: 2D12 Rounds

Symptoms: Severe Itchiness, Weakness

Damage: Paralyzation

Save: Save Vs Paralyzation

ACONTINE

Dosage: (2mg)

DC: 19

Onset: 1D8 Minutes

Duration: 2D10 Hours

Symptoms: Chill, Convulsions/Seizures, Nausea/Vomiting, Numbness, Sore Throat, Weakness

Damage: Cardiac Failure 3D30+20 +3d6 Per Hour, Minor Kidney Damage, Minor Liver Damage

Save: Save Vs Cardiac Failure(Reduce Damage By 85%)

ACUTUMINE

Dosage: (15mg)

DC: 17

Onset: 10D4 Minutes

Duration: 1D10+6 Hours

Symptoms: Confusion, Convulsions/Seizures, Cough

Damage: Paralyzation, Spine Damage, Spine Injury 4d20+10

Save: Save Vs Spine Damage, Save Vs Spine Injury(Reduce Damage By 50%)

AMYGDALIN

Dosage: (217mg)

DC: 15

Onset: 1D4 Rounds

Duration: 2D6 Hours

Symptoms: Convulsions/Seizures, Deafness, Dizziness, Headache, Weakness

Damage: Coma, Asphyxiation 3D20+10 +2D6 Per Round

Save: Save Vs Asphyxiation, Save Vs Coma

ANAGYRINE

Dosage: (100mg)

DC: 18

Onset: 2D6 Hours

Duration: 4D6 Hours

Symptoms: Blurred Vision, Dizziness, Drowsiness, Fainting, Incoordination, Weakness

Damage: Coma, Paralyzation, Unconsciousness

Save: Save Vs Coma, Save Vs Paralyzation, Save Vs Unconsciousness

ANTIRRINOSIDE

Dosage: (320mg)

DC: 28

Onset: 3D4 Days

Duration: 2D6 Days

Symptoms: Albinism

Damage: None

Save: Reduce Duration By 50%

ATROPINE

Dosage: (50mg)

DC: 19

Onset: 1D4 Hours

Duration: 1D4 Hours

Symptoms: Confusion, Convulsions/Seizures, Drowsiness, Fever, Halucinations, Memory Loss, Rash, Weakness

Damage: Paralyzation, Asphyxiation 3D20+10 +2D6 Per Round

Save: Save Vs Asphyxiation(Increase Duration By 20%), Save Vs Paralyzation

BAECRIA

Dosage: (75mg)

DC: 14

Onset: 1D12 Hours

Duration: 4D12 Hours

Symptoms: Cramps, Diarrhea, Labored Breathing, Weakness

Damage: None

Save: Reduce Duration By 25%

BAKANTIN

Dosage: 1.6lbs(725g)

DC: 30

Onset: 1D6 Days

Duration: Permanent

Symptoms: Numbness (Feet, Legs)

Damage: Paralyzation(Legs)

Save: None

BAPTISIN

Dosage: (840mg)

DC: 11

Onset: 1D4 Hours

Duration: 1D4 Hours

Symptoms: Diarrhea, Dizziness, Nausea/Vomiting

Damage: None

Save: Reduce Duration By 50%

BELLADONNA

Dosage: (2mg)

DC: 19

Onset: 1D6 Hours

Duration: 3D20 Hours

Symptoms: Confusion, Convulsions/Seizures, Diarrhea, Drowsiness, Fever, Pain, Nausea/Vomiting, Weakness

Damage: Coma, Liver Damage, Liver Failure 5D20+15

Save: Save Vs Coma, Save Vs Liver Failure

CALODINE

Dosage: (60mg)

DC: 17

Onset: 2D6 Minutes

Duration: 1 Hour

Symptoms: Dizziness, Fainting, Nausea/Vomiting, Severe Pain, Weakness

Damage: Hemorrhaging 3D10+20 +2D6 Per Round, Liver Damage

Save: Save Vs Hemorrhaging(Reduce Damage By 35%), Save Vs Liver Damage

CHELIDONINE

Dosage: (380mg)

DC: 18

Onset: 3D10 Hours

Duration: 5D6 Minutes

Symptoms: Drowsiness, Pain(Chest), Intense Thirst

Damage: Mild Asphyxiation 2D10 +2D4 Per Minute

Save: Save Vs Mild Asphyxiation

CICUTOL

Dosage: (400mg)

DC: 23

Onset: Instant

Duration: 3D4 Hours

Symptoms: Pallor(Eyelids, Face, Lips), Weakness

Damage: Anti-Coagulation

Save: Reduce Duration By 25%

CIROTINE

Dosage: (2.5g)

DC: 21

Onset: 1D4 Hours

Duration: 2D6 Hours

Symptoms: Confusion, Dizziness, Drowsiness, Headache

Damage: Coma, 1D12 Per Hour

Save: Save Vs Coma(Increase Duration By 40%)

COLICINE

Dosage: (14mg)

DC: 16

Onset: 1D6 Rounds

Duration: 4D6 Hours

CHAPTER 6 - TOXIC PLANTS

Symptoms: Flatulence, Pain(Abdominal), Sweating
Damage: None
Save: Reduce Duration By 50%

CONUBIDE

Dosage: (35mg)
DC: 15
Onset: 1D4 Rounds
Duration: 3D6 Hours
Symptoms: Cough, Intense Thirst
Damage: Laryngitis
Save: Reduce Duration By 50%

CYANIDE(ORGANIC)

Dosage: .01oz(300mg)
DC: 17
Onset: 1D6 Hours
Duration: 1D4 Hours
Symptoms: Convulsions/Seizures, Deafness, Dizziness, Headache, Skin Discoloration(Cyan), Weakness
Damage: Brain Damage, Cardiac Failure 3D30+20 +3d6 Per Hour, Unconsciousness
Save: Save Vs Brain Damage, Save Vs Cardiac Failure, Save Vs Unconsciousness

CYCLAMIN

Dosage: (600mg)
DC: 12
Onset: Instant
Duration: 1D4 Hours
Symptoms: Difficulty Speaking
Damage: Paralyzation(Mouth, Tongue)
Save: Reduce Duration By 25%

CYROTINE

Dosage: (550mg)
DC: 14
Onset: 3D4 Hours
Duration: 24 Hours
Symptoms: Dizziness, Fever, Headache, Nausea/Vomiting, Weakness
Damage: None
Save: Reduce Duration By 50%

CYTISINE

Dosage: (60mg)
DC: 15
Onset: Instant
Duration: 5D6 Hours
Symptoms: Convulsions/Seizures, Dizziness, Headache
Damage: Unconsciousness
Save: Reduce Duration By 75%, Save Vs Unconsciousness

DEOXYIN

Dosage: (16g)
DC: 12
Onset: 3D4 Rounds
Duration: 2D12 Hours

Symptoms: Diarrhea, Fatigue, Memory Loss, Pain(Abdominal)
Damage: None
Save: Reduce Duration By 50%

DIGITALIS

Dosage :(5mg)
DC: 18
Onset: 2D20 Rounds
Duration: 2D4 Hours
Symptoms: Blurred Vision, Convulsions/Seizures, Nausea/Vomiting, Severe Headache, Pain(Stomach), Swelling(Overall)
Damage: Cardiac Failure 3D30+20 +1D4 Per Round
Save: Save Vs Cardiac Failure(Reduce Damage By 25%)

DITERPINOL

Dosage: (230mg)
DC: 14
Onset: Instant
Duration: 2D10 Days
Symptoms: Pain (Abdominal), Inflammation(Mouth)
Damage: Paralyzation (Mouth)
Save: Reduce Duration By 50%

EVOMONOSIDE

Dosage: (190mg)
DC: 15
Onset: 1D4 Hours
Duration: 3D6 Hours
Symptoms: Blurred Vision, Convulsions/Seizures, Nausea/Vomiting, Severe Headache, Pain(Stomach), Swelling(Overall)
Damage: Cardiac Failure 3D30+20 +1D4 Per Round
Save: Save Vs Cardiac Failure(Reduce Damage By 30%)

EYCORINE

Dosage: (4.5g)
DC: 22
Onset: 2D4 Days
Duration: 1D4 Days
Symptoms: Dizziness, Severe Headache, Memory Loss
Damage: Brain Damage
Save: Save Vs Brain Damage

FROHNIDE

Dosage: (1g)
DC: 18
Onset: 1D4 Rounds
Duration: 1D12 Hours
Symptoms: Dizziness, Drowsiness
Damage: Unconsciousness
Save: Save Vs Unconsciousness

GITHAGINE

Dosage: (900mg)
DC: 17
Onset: 1D10 Minutes
Duration: 1D2 Hours
Symptoms: None
Damage: Paralyzation(Muscle)
Save: Reduce Duration By 50%

GLUCOSINOLA

Dosage: (10g)
DC: 22
Onset: 1 Month
Duration: 1D6 Hours
Symptoms: Dizziness, Fainting, Headache, Incoordination, Nausea/Vomiting, Difficulty Speaking, Weakness
Damage: Liver Damage
Save: Save Vs Liver Damage

GYRIENIDE

Dosage: (825mg)
DC: 20
Onset: 1D10 Hours
Duration: 12 Hours
Symptoms: Convulsions/Seizures, Dizziness, Headache, Incoordination, Nausea/Vomiting
Damage: Paralyzation, Dehydration
Save: Save Vs Dehydration, Save Vs Paralyzation, Reduce Duration By 30%

HELENALIN

Dosage: (50mg)
DC: 16
Onset: Instant
Duration: 3D6 Minutes
Symptoms: Irritation(Eyes, Nose), Sneezing
Damage: None
Save: Reduce Duration By 40%

HELIOSUPINE

Dosage: (112mg)
DC: 22
Onset: 1D4 Days
Duration: 36 Hours
Symptoms: Dizziness, Fainting, Headache, Incoordination, Nausea/Vomiting, Difficulty Speaking, Weakness
Damage: Liver Damage
Save: Save Vs Liver Damage

HORTUS

Dosage: (1g)
DC: 19
Onset: 4D8 Minutes
Duration: Permanent
Symptoms: Dizziness, Headache
Damage: Blindness

CHAPTER 6 - TOXIC PLANTS

Save: Save Vs Blindness

HYOSCYAMINE

Dosage: (500mg)

DC: 19

Onset: 3D10 Minutes

Duration: 1D12+12 Hours

Symptoms: Dizziness, Euphoria, Fainting, Incoordination, Intense Thirst

Damage: Unconsciousness

Save: Save Vs Unconsciousness

INGENOL

Dosage: (225mg)

DC: 11

Onset: 1D6 Rounds

Duration: 3D12 Hours

Symptoms: Headache, Incoordination, Nausea/Vomiting, Sweating

Damage: Cardiac Failure 3D30+20 +1D10 Per Round

Save: Save Vs Cardiac Failure

INOSAE

Dosage: (15g)

DC: 15

Onset: 1D6 Hours

Duration: 6D4 Hours

Symptoms: Dizziness, Headache, Pain, Swelling(Nose)

Damage: Deafness

Save: Reduce Duration by 40%

INTERMEDIATE

Dosage: (400mg)

DC: 21

Onset: 1D4+2 Days

Duration: Permanent

Symptoms: Dry Skin, Hair Loss, Intense Thirst, Severe Itchiness

Damage: 3D4 Sores(1D4 Per Sore, Per Hour)

Save: Reduce Damage By 50%

ISOFLAVIDE

Dosage: (5g)

DC: 11

Onset: 2D6 Rounds

Duration: 4D8 Rounds

Symptoms: Severe Flatulence

Damage: None

Save: Save Vs Flatulence

JERVINE

Dosage: (85mg)

DC: 12

Onset: 2D8 Rounds

Duration: 1D4 Hours

Symptoms: Blurred Vision, Chills, Cough, Diarrhea, Fever, Headache

Damage: None

Save: Reduce Duration By 10%

KERATO

Dosage: (1.8g)

DC: 26

Onset: Instant

Duration: 1D10 Days

Symptoms: Swelling(Eyelids)

Damage: Blindness

Save: Save Vs Blindness

LACTINE

Dosage: (30mg)

DC: 17

Onset: 2D8 Hours

Duration: 1D4 Days

Symptoms: Drowsiness, Headache, Weakness

Damage: Mild Asphyxiation 2D10 +2D4 Per Minute

Save: Save Vs Mild Asphyxiation

LOBELINE

Dosage: (625mg)

DC: 16

Onset: 3D4 Days

Duration: 2D6 Days

Symptoms: Headache, Incoordination, Nausea/Vomiting, Pain, Sweating

Damage: Paralyzation, Coma, Kidney Failure 3D20+10 +3D6 Per Hour

Save: Save Vs Coma, Save Vs Kidney Failure(Reduce Duration By 50%)

LOCAMIDE

Dosage: (300mg)

DC: 19

Onset: 1D6+1 Days

Duration: 3D4 Hours

Symptoms: Convulsions/Seizures, Unconsciousness

Damage: 2D8 Per Hour

Save: Save Vs Unconsciousness

LOCAMINE

Dosage: (100mg)

DC: 18

Onset: 10D6 Minutes

Duration: 3D20 Hours

Symptoms: Headache, Incoordination, Nervousness

Damage: None

Save: Reduce Duration By 70%

LOCANE

Dosage: (85mg)

DC: 12

Onset: 2D8 Rounds

Duration: 1D4 Hours

Symptoms: Bruises(Face & Neck)

Damage: 2D8 Bleeding Sores(3D4 Per Sore, Per Hour)

Save: Reduce Damage By 25%

LUCOSINOLATE

Dosage: (15mg)

DC: 17

Onset: 1D6 Hours

Duration: 3D6 Hours

Symptoms: Nausea/Vomiting, Sweating

Damage: None

Save: Reduce Duration By 25%

MALACIA

Dosage: (9g)

DC: 11

Onset: 2D8 Hours

Duration: 4D12 Hours

Symptoms: Dehydration, Headache, Itchiness, Pallor, Rash, Severe Pain(Joints)

Damage: None

Save: Reduce Duration By 55%

MITINATE

Dosage: (200mg)

DC: 18

Onset: Instant

Duration: 6D4 Hours

Symptoms: Dizziness, Headache

Damage: Insomnia

Save: Reduce Duration By 50%

NICOTINE

Dosage: (60mg)

DC: 12

Onset: 2D20 Minutes

Duration: 1D4 Days

Symptoms: Blurred Vision, Confusion, Diarrhea, Dizziness, Headache, Incoordination, Nausea/Vomiting, Pallor, Difficulty Speaking, Sweating

Damage: Asphyxiation 3D20+10 +2D6 Per Round, Cardiac Failure 3D30+20 +1D10 Per Round

Save: Save Vs Asphyxiation(Reduce Damage By 25%, Reduce Duration By 75%), Save Vs Cardiac Failure

NYCORIDE

Dosage: (10g)

DC: 16

Onset: 6D6 Minutes

Duration: 2D4 Hours

Symptoms: Dizziness, Headache

Damage: Unconsciousness

Save: None

OLEANDRIN

Dosage: 4oz(113.4g)

DC: 21

Onset: 1D2+1 Days

Duration: Permanent

Symptoms: Headache, Incoordination, Nausea/Vomiting, Pain, Sweating, Weakness

Damage: Cardiac Failure 6D10+5

CHAPTER 6 - TOXIC PLANTS

Save: Save Vs Cardiac Failure(Reduce Damage By 50%)

ONTIANIN

Dosage: (2g)

DC: 11

Onset: 1D30 Minutes

Duration: 1D6+3 Hours

Symptoms: Drowsiness, Fever

Damage: Unconsciousness

Save: (Reduce Duration By 90%)

OPIUM

Dosage: (20g)

DC: 21

Onset: Instant

Duration: 2D6 Hours

Symptoms: Confusion, Drowsiness, Euphoria, Itchiness, Nausea/Vomiting

Damage: Asphyxiation 3D20+10 +2D6 Per Round, Coma

Save: Save Vs Asphyxiation, Save Vs Coma

ORANINE

Dosage: (80mg)

DC: 17

Onset: 1D20 Rounds

Duration: 1D6 Hours

Symptoms: Euphoria, Intoxication

Damage: Coma

Save: Save Vs Coma, Reduce Duration By 60%

OSINOL

Dosage: (490mg)

DC: 18

Onset: 2D12 Minutes

Duration: 1 Hour

Symptoms: Flatulence, Pain(Abdominal), Nausea/Vomiting, Rash(Face)

Damage: None

Save: Reduce Duration By 50%

OXALATE(OXALIC ACID)

Dosage: (1g)

DC: 19

Onset: Instant

Duration: 4D6 Hours

Symptoms: Pain(Mouth)

Damage: Paralyzation(Mouth, Throat), Asphyxiation 3D20+10 +2D6 Per Round

Save: Save Vs Asphyxiation

OXYNENOL

Dosage: (300mg)

DC: 15

Onset: Instant

Duration: 2D4 Hours

Symptoms: Headache, Incoordination, Nausea/Vomiting, Pain, Sweating, Weakness

Damage: Cardiac Attack 3D30+20

Save: Save Vs Cardiac Attack

PALUSTRINE

Dosage: (2.9g)

DC: 11

Onset: 1 Hour

Duration: 5D6 Minutes

Symptoms: Dizziness, Incoordination, Weakness

Damage: None

Save: Reduce Duration By 30%

PHYTOLAGEN

Dosage: (100mg)

DC: 15

Onset: 1D4 Days

Duration: 24 Hours

Symptoms: Blurred Vision, Confusion, Convulsions/Seizures, Deafness, Dizziness, Headache, Shivering

Damage: Brain Damage, Nerve Damage

Save: Save Vs Brain Damage(Reduce Damage By 50%)

PRUNASIN

Dosage: 2.5oz(72.8g)

DC: 19

Onset: 1D4 Rounds

Duration: 2D6 Minutes

Symptoms: Convulsions/Seizures, Headache, Incoordination, Labored Breathing,

Damage: Coma, Paralyzation, Severe Asphyxiation 5D20+10 +2D8 Per Round

Save: Save Vs Coma, Save Vs Severe Asphyxiation(Reduce Damage By 60%)

PRUSSIC ACID

Dosage: (550mg)

DC: 22

Onset: 2D4 Rounds

Duration: 2D6 Rounds

Symptoms: Cough, Dizziness, Severe Pain(Chest), Wheezing

Damage: Coma, Asphyxiation 3D20+10 +2D6 Per Round

Save: Save Vs Coma, Save Vs Asphyxiation

PYRROLIZIDINE

Dosage: 478mg

DC: 16

Onset: 4D4 Hours

Duration: 2D6 Hours

Symptoms: Pain(Abdominal), Swelling(Abdominal)

Damage: Liver Damage

Save: Save Vs Liver Damage(Reduce Damage By 50%)

QUINONE

Dosage: (8g)

DC: 21

Onset: 3D6 Hours

Duration: 3D6 Hours

Symptoms: Convulsions/Seizures, Fatigue, Fever, Jaundice, Nausea/Vomiting, Pain(Abdominal)

Damage: Internal Bleeding 1D4 Per Round, Kidney Damage

Save: Reduce Duration by 75%, Save Vs Kidney Damage

RANUNCULIN

Dosage: (13mg)

DC: 14

Onset: Instant

Duration: 3D4 Hours

Symptoms: Blistering, Itchiness, Severe Rash

Damage: None

Save: Reduce Duration By 50%

RHOEADINE

Dosage: (300mg)

DC: 23

Onset: Instant

Duration: 1D6 Rounds

Symptoms: Chill, Convulsions/Seizures, Nausea/Vomiting, Numbness, Weakness

Damage: Cardiac Failure 20D4+10 +3D6 Per Round

Save: Save Vs Cardiac Failure(Reduce Damage By 50%, Reduce Duration By 25%)

RICIN

Dosage: (.16mg)

DC: 25

Onset: 1D6 Rounds

Duration: 1D3 Days

Symptoms: Cough, Drowsiness, Fever, Headache, Nausea/Vomiting, Pain, Sore Throat, Weakness

Damage: Severe Asphyxiation 5D20+10 +2D8 Per Round, Cardiac Failure 5D20+20 +1D10 Per Round

Save: Save Vs Severe Asphyxiation(Reduce Damage By 25%), Save Vs Cardiac Failure(Reduce Damage By 25%)

SANGUINARINE

Dosage: (200g)

DC: 18

Onset: 3D4 Days

Duration: 1D4 Days

Symptoms: Blurred Vision, Dizziness, Nausea/Vomiting, Pain(Abdominal), Thirst

Damage: Kidney Failure 3D20+10 +3D6 Per Hour

Save: Reduce Duration By 25%

SAPONIN

Dosage: (464mg)

DC: 19

CHAPTER 6 - TOXIC PLANTS

Onset: 1D12 Minutes
Duration: 1D6 Hours
Symptoms: Headache, Earache, Nausea/Vomiting, Sore Throat
Damage: None
Save: Reduce Duration By 50%

SENECIONINE

Dosage: (65mg)
DC: 30
Onset: 3D4 Hours
Duration: 2D4 Weeks
Symptoms: Blurred Vision, Deafness, Diarrhea, Drooling, Nausea/Vomiting
Damage: Cardiac Depression 2D20+20
Save: Save Vs Cardiac Depression

SERIDE

Dosage: (16mg)
DC: 11
Onset: 1 Hour
Duration: 23+1D8 Hours
Symptoms: Blurred Vision, Dizziness, Headache, Shivering
Damage: None
Save: None

STRYCHNINE

Dosage: (260mg)
DC: 16
Onset: 8D4 Minutes
Duration: 1D2 Days
Symptoms: Convulsions/Seizures, Cramps, Nausea/Vomiting
Damage: Asphyxiation 3D20+10 +2D6 Per Round, Coma, Paralyzation
Save: Save Vs Asphyxiation(Reduce Damage By 40%), Save Vs Coma

TAXIPHILLIN

Dosage: (60mg)
DC: 18
Onset: 3D10+30 Minutes
Duration: 4D4 Rounds
Symptoms: Blurred Vision, Difficulty Speaking, Sore Throat, Thirst, Weakness
Damage: Asphyxiation 3D20+10 +2D6 Per Round
Save: Save Vs Asphyxiation

TELOUINE

Dosage: (70mg)
DC: 24
Onset: 1D20 Minutes
Duration: 2D20 Hours
Symptoms: Difficulty Speaking, Drooling, Sore Throat
Damage: Paralyzation(Jaw)
Save: Reduce Duration By 30%

TENGENOL

Dosage: (300mg)

DC: 11
Onset: Instant
Duration: 24 hours
Symptoms: Rash, Severe Itchiness
Damage: None
Save: Reduce Duration By 50%

THERMOPSIS

Dosage: (78mg)
DC: 11
Onset: 2D6 Rounds
Duration: 2D8 Rounds
Symptoms: Convulsions/Seizures, Headache, Incoordination
Damage: Asphyxiation 3D20+10 +2D6 Per Round
Save: Save Vs Asphyxiation

THYMELA

Dosage: (450mg)
DC: 12
Onset: 6D4 Hours
Duration: 1D4 Weeks
Symptoms: Severe Hair Loss, Weakness
Damage: None
Save: None

TROENTE

Dosage: (1g)
DC: 11
Onset: Instant
Duration: 3D6 Hours
Symptoms: Nausea/Vomiting
Damage: (Effects Only Creature Type: PLANT) 3D6+5
Save: Reduce Duration By 50%

TYLOSIDE

Dosage: (267mg)
DC: 19
Onset: 1D10 Rounds
Duration: 6D10 Minutes
Symptoms: Convulsions/Seizures, Diarrhea, Headache, Nausea/Vomiting, Pain(Abdominal)
Damage: Liver Damage, Minor Kidney Damage
Save: Save Vs Liver Damage(Reduce Damage by 50%), Save Vs Minor Kidney Damage

UKONINE

Dosage: (250 mg)
DC: 16
Onset: 2D20 Rounds
Duration: 3D12 Hours
Symptoms: Chills, Cough, Fever, Pain(Chest)
Damage: None
Save: Reduce Duration By 25%

URUSHIOL

Dosage: (200mg)
DC: 20
Onset: 6D8 Hours
Duration: 1D8+2 Days
Symptoms: Blistering, Fever, Nausea/Vomiting, Rash, Swelling(Skin, Throat)
Damage: 3D4 Sores(1D4 Per Sore, Per Hour)
Save: Immunity(Permanent)

VINCRISTINE

Dosage: (550mg)
DC: 19
Onset: 3D6 Minutes
Duration: 2D4 Hours
Symptoms: Convulsions/Seizures, Hair Loss, Pain(Jaw)
Damage: Asphyxiation 3D20+10 +2D6 Per Round
Save: Save Vs Asphyxiation (Reduce Damage By 35%)

VOXYIN

Dosage: (500mg)
DC: 17
Onset: 1D6 Hours
Duration: 2D4 Hours
Symptoms: Diarrhea, Inflammation(Mouth), Pain(Abdominal)
Damage: None
Save: Reduce Duration By 50%

XOLATE

Dosage: (20.8g)
DC: 11
Onset: 1D6 Hours
Duration: 1D2 Days
Symptoms: Headache, Fever
Damage: Coma
Save: Save Vs Coma

XYPHORBOL

Dosage: (100mg)
DC: 25
Onset: Instant
Duration: 1D2 Days
Symptoms: Drowsiness, Weakness
Damage: Reduced Healing
Save: Reduce Duration By 50%

Zygacine

Dosage: (20mg)
DC: 21
Onset: 1 Round
Duration: 10D6 Minutes
Symptoms: Dizziness, Headache, Pain
Damage: Brain Damage, Unconsciousness
Save: Save Vs Brain Damage

CHAPTER 7 - SNAKE VENOMS

SNAKES

Snakes seem to inspire either awe or fear. They hiss, they slither, they rattle, they don't blink, they shed their skin and do dozens of other things that are disturbing to see. A few species can puff themselves up and others can play dead. Some have horns or odd protrusions and worst of all, their venom can cause severe pain or death within minutes when sprayed or injected through their needle-sharp fangs. For many of us, this one attribute alone is the stuff of nightmares.

MYTHS AND LORE

Some cultures hold snakes in high esteem as powerful religious symbols. Quetzalcoatl, the mythical plumed serpent, was worshipped as the Master of Life by ancient Aztecs of Central America. Some African cultures worship rock pythons and consider the killing of one to be a serious crime. In Australia, the Aborigines associate a giant rainbow serpent with the creation of life.

Other cultures associate snakes with medicinal powers or rebirth. In India, one large and prominent Shaiva sect consists of the warrior ascetics, or Nagas, who have gathered since the prehistoric past. Cobras are regarded as reincarnations of these important people. Even the modern medical symbol of two snakes wrapped around a staff, or caduceus, comes from ancient Greek mythology. According to the Greeks, the mythical figure Aesculapius discovered medicine by watching as one snake used herbs to bring another snake back to life.

Judeo-Christian culture is less kind to snakes. Tales of the Garden of Eden and the serpent's role in man's fall from grace contributes to the negative image of snakes in western culture. In Appalachia, some Baptists handle venomous snakes as part of ritual ceremonies, relying on faith to protect them from bites. Among Catholics, Saint Patrick is credited with ridding Ireland of snakes, a feat celebrated by many as a very good thing.

FOLK TALES

Folk tales about snakes include such fanciful things as snakes charming prey, swallowing their young for protection, poisoning people with their breath, rolling like hoops, and sucking milk from cows. While completely false, in certain games, these folk tales are applicable. A fantasy hoop snake could really roll like a dangerous hoop, or an alien Puff adder look-alike species could spew toxic vapor. This application of myth is entirely up to the GM's individual tastes.

Hoop Snakes: Hoop snakes are dangerous snakes. When surprised, this snake will grab its tail in its mouth, form a hoop with its body, and roll away. Sometimes the hoop snake will chase a person in this manner, but sometimes the hoop snake will escape from a threat. The strongest of hoop snakes will roll down a hill killing everything in its path.

Swallowing Young: When confronted with danger, mother snakes swallow their young, spitting them out later once danger has passed.

Snakes Travel In Pairs: Snakes travel in pairs, and if

one is killed, the survivor will seek revenge.

Charming: Snakes have the ability to charm prey, especially birds, so they cannot flee.

Sucking Milk: Milk snakes are so named because of their ability to suck milk directly from the udders of cows.

Poisonous Breath: Puff adders mix poison with their breath and can kill a person at a distance of 25'.

Snakes Travel In Pairs. If one snake is killed the other snake seeks revenge.

UNDERSTANDING SNAKES

There are about 3000 known species of snake in the world. They have evolved specialist adaptations for living in a variety of different environments, and range in size from 4" to an excess of 38'. Despite this diversity, one characteristic they all share is their eating habits; They swallow their prey whole. The typical meal for a snake is infrequent but usually large as snakes can swallow prey larger than their own heads. This unique shape and function of their skull bones allows this. Even worm snakes, that mainly eat insects, take a large number in one meal. The bones of

a snake skull has as many as seventeen flexible connections. The bones that suspend the lower jaws have flexible attachments to the skull. Unlike most vertebrates the two halves of the lower jaw are linked only by elastic ligaments. It's a very flexible skull and the left and right hand upper jaws can move independently of one another. The snout is movable on the rigid brain case. By comparison, humans have only one flexible connection in their skulls between the lower jaw and the rest of the skull.

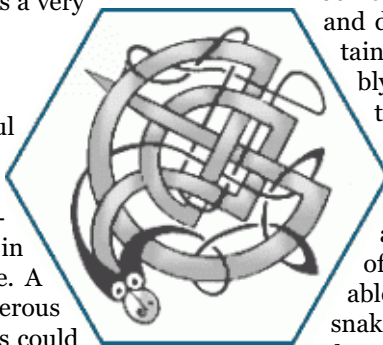
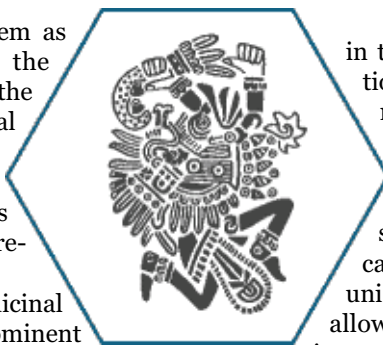
A snake's primary sense in the recognition of food is by detecting chemicals. Snakes are commonly seen flicking out their tongue. By dabbing the tongue on the ground the snake can follow a scent trail.

Some of the more evolved snakes have good eyesight and detect prey movement visually. Snake eyes contain light-receptive chemicals such that could possibly perceive color, but there is no demonstration that they do.

Some snakes are amphibious, such as the North American garter snake and the European grass snake. These snakes travel across the ground with side-to-side movements of the body and when they come to water, they are able to swim using these same movements. Other snakes are more fully committed to life in fresh water.

There are about 50 species of snake that live in the sea. A few come ashore to lay eggs but the majority spend their whole lives in water, produce live young in the water and are almost helpless if brought ashore. Their tails are flattened sideways like eels and facilitate swimming.

The majority of sea-snake species are found around southeast Asia and the islands down to northern Australia. Most are about 3' long, although they can grow up to 6' in length. Sea snakes are front-fanged snakes, highly venomous but are fortunately not particularly aggressive. Fishermen sometimes catch them in their nets and throw them back into the water. They usually get away with it, but more than one fisherman gets a



CHAPTER 7 - SNAKE VENOMS

nasty bite for his trouble.

Tree snakes are unable to follow a scent trail from branch to branch through a tree so they have particularly good eyesight. When they detect the movement of a prey, such as a lizard or frog, they slither up, folding their necks into an S-shape and flicking their tongues up and down very fast. As they pick up scent particles from the air they are able to judge their distance from the prey and when within range strike with deadly accuracy. They are able to gain a purchase on rough bark by gripping with the scales on the belly which overlap one another providing sufficient friction. A few of these snakes can glide from tree to tree, but none can fly. Potential prey can avoid the snakes by taking to the air, but sooner or later they have to come down to earth. Given their lack of limbs, snakes really are extraordinarily versatile predators.

Pythons and pit vipers have heat-detecting organs contained in special pits. Pythons' pits are situated around the snout and in the lower jaw, facing forwards. They are nocturnal and detect the heat of warm-blooded prey, like small mammals and birds, in the dark. Pit viper pits are situated between the eyes and the nostrils and also face forwards and contain many heat-sensitive nerve endings. In effect, the pit organs are extending the snake's vision into the infra-red.

Venomous snakes have developed various features that warn off would-be predators. The coral snakes have venom sufficiently powerful to harm a human being and are brightly colored with bands of black, yellow and red. Some harmless snakes have developed similar body markings which send the same messages to local predators and people alike. In southern North America and tropical South America there are many species of snake that mimic the genuinely dangerous coral snakes.

Cobras deter predators by spreading their hoods and hissing loudly. Spitting cobras have fangs with round openings that direct the venom forwards. They use this fang to bite prey in the usual way but deter predators by ejecting the venom out forcefully. They can spit accurately for more than a yard. If an animal gets the venom in their eyes it can permanently damage the cornea. Different species of spitting cobra are found in parts of Africa and Asia.

Wear and tear take their toll on the fangs, which are soon blunted or torn out by the struggles of prey animals. Fresh fangs are always held in reserve, each poised to move into position when required. The base of a functioning fang, and often the first reserve fang behind it as well, is penetrated by a duct that leads from a large gland behind the eye. These glands are situated on either side of the head, and are modified salivary glands surrounded by muscle. When these muscles contract they force the clear or yellowish venom along the venom ducts and down through the fangs, squirting out under pressure as if from a pair of hypodermic syringes. Venom may be injected with each of a possible series of consecutive bites.

25% of all bites by venomous snakes are 'dry'. Snakes can and often do meter the amount of venom they inject in any

given bite. In nature, it's really not in a snake's best interest to waste venom on anything it can't eat, as the purpose of venom is to kill prey and begin the digestion process before the snake even starts to swallow it. When a snake makes a successful attack roll, the GM should also roll a D4. If a 1 is rolled, the snake bite is without venom.

VIPERIDAE VENOM

Dosage: .032oz(900mg)

DC: 30

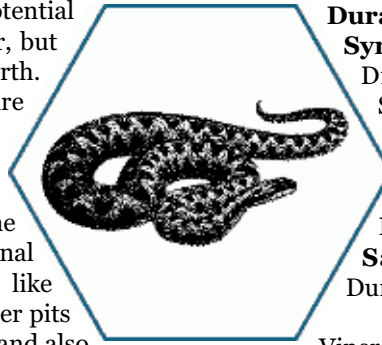
Onset: 5D4 Minutes

Duration: 4D4 Hours

Symptoms: Blurred Vision, Convulsions/Seizures, Diarrhea, Discoloration, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Bite), Severe Localized Pain(Bite), Weakness

Damage: Internal Bleeding, 1D4+6 Per Minute

Save: Save Vs Internal Bleeding (Reduces Duration By 90%)



Vipera Ursini

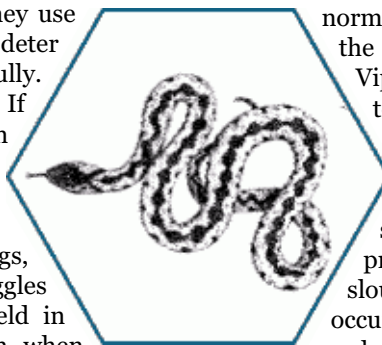
Vipers are any of a large number of poisonous snakes in the family Viperidae that lack any specific specialized traits, like rattles or heat-sensing glands. They are also commonly known as adders or asps, and are very similar in appearance to the non-poisonous Grass Snake (*Natrix Natrix*). A full-grown adult viper can be up to 26" long, much smaller than a grass snake. The patterning and the background color becomes duller just before the snake sheds skin. The viper has vertical elliptical pupils, unlike the round pupils of smooth and grass snakes, and the head is relatively broader, with a more pronounced neck. Shed skins are often easily identified by the zig-zag which shows up against the light by head scales, since vipers have many more small scales on the head.

The viper is endothermic, it depends on external sources of heat to raise its body temperature in order to permit normal activity. Much of its behavior is governed by the need to maintain a suitable body temperature.

Vipers generally bask in order to raise their body temperatures, but they may also gain heat by contact with warm surfaces such as rocks.

Both sexes bask for a short period in spring during which time they do not feed, they then shed their skins and become more active in preparation for mating. Adults of both sexes will slough once more in the summer. Mating usually occurs in late spring, and may be preceded by a male combat ritual in which rival males entwine the anterior halves of their bodies and attempt to push each other down to the ground. Males follow scent trails left by females, and copulation itself may last for two hours. The eggs are retained inside the female and live young are born in early autumn, usually close to the hibernation area. There are usually 2D4+2 snakes per litter with females generally only giving birth every other year.

Feeding commences after mating. Their diet is mostly small mammals and reptiles, particularly mice, voles and common lizards. They also take fledgling birds, and occasionally frogs. Vipers can swim well, but this is generally a much rarer



Atractaspis Congica

CHAPTER 7 - SNAKE VENOMS

component of their behavior than is the case for grass snakes, which habitually prey on amphibians.

Hibernation sites are often associated with banks, often south facing. Generally these are in well-drained soil, often with woodland or scrub, and the vegetation can be quite dense. Earthen banks are frequently used and holes in the ground or fissures, such as those associated with tree roots or mammal burrows, are also often occupied. Old stone walls or piles of rubble may also be used. It appears the main criteria are that the site should be easily penetrable, avoid becoming water-logged, provide a frost-free hibernating den and be in a relatively sunny position. vipers may hibernate communally, sometimes along with other reptile species.

Trimeresurus Albolabris
Common Name(s): White-Lipped Tree Viper

Trimeresurus Flavoviridis
Common Name(s): Habu

Trimeresurus Gramineus
Common Name(s): Green Tree Viper

Trimeresurus Monticola
Common Name(s): Chinese Mountain Viper

Trimeresurus Mucrosquamatus
Common Name(s): Chinese Habu

Trimeresurus Okinavensis
Common Name(s): Himehabu

Trimeresurus Popeorum
Common Name(s): Pope's Tree Viper

Trimeresurus Purpureomaculatus
Common Name(s): Mangrove Viper

Trimeresurus Stejnegeri
Common Name(s): Chinese Green Tree Viper

Trimeresurus Wagleri
Common Name(s): Wagler's viper

Vipera Ammodytes
Common Name(s): Long-Nosed Viper

Vipera Asp
Common Name(s): Asp Viper

Vipera Berus
Common Name(s): European Viper

Vipera Latasti
Common Name(s): Lataste's Snub-Nosed Viper

Vipera Lebetina
Common Name(s): Levantine Viper

Vipera Russellii
Common Name(s): Russell's Viper

Vipera Ursinii
Common Name(s): Orsini's Viper

Vipera Xanthina
Common Name(s): Near East Viper

Vipera Xanthina Palaestinae
Common Name(s): Palestine Viper

Vipera Xanthina Xanthina
Common Name(s): Turkish Viper

Adder Breeds

Atractaspis Bibronii
Common Name(s): Bribron's Burrowing Adder, Stiletto Snake

Atractaspis Congica
Common Name(s): Congo Burrowing Adder

Bitis Arietans
Common Name(s): Puff Adder

Bitis Atropos
Common Name(s): Berg Adder

Bitis Caudalis
Common Name(s): Horned Puff Adder

Bitis Cornuta
Common Name(s): Horned Adder

Bitis Gabonica
Common Name(s): Gaboon Adder

Bitis Inornata
Common Name(s): Cape Puff Adder

Bitis Peringuey
Common Name(s): Peringuey's Adder

Causus Depfilppi
Common Name(s): Snouted Night Adder

Causus Lichtensteinii
Common Name(s): Lichtenstein Night Adder

Causus Rhombeatus
Common Name(s): Common Night Adder

Vipera Berus
Common Name(s): Cross Adder

Vipera Kaznakovi
Common Name(s): Caucasus Adder

Vipera Lebetina
Common Name(s): Desert Adder

Vipera Superciliaris
Common Name(s): African Lowland Adder

Vipera Ursini
Common Name(s): Meadow Adder

Asp Breeds

Cerastes Vipera
Common Name(s): Cleopatra's Asp, Sahara Sand Viper

Vipera Asp

Common Name(s): European Asp

Atheris Species
Common Name(s): African Bush Vipers

Atractaspis Species
Common Name(s): Mole Vipers

Bitis Gabonica
Common Name(s): Gaboon Viper

Bitis Naricornis
Common Name(s): Rhinoceros Viper

Bothrops Nasutus
Common Name(s): Hognose Viper

Bothrops Nummifer
Common Name(s): Jumping Viper

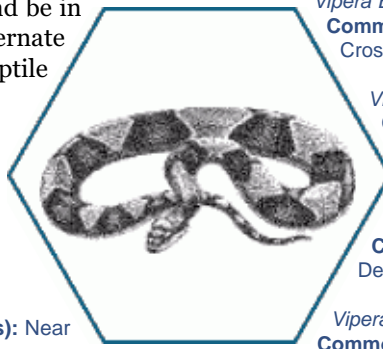
Bothrops Schlegelii
Common Name(s): Eyelash Viper

Cerastes Cerastes
Common Name(s): Horned Viper

Echis Carinatus
Common Name(s): Saw-Scaled Viper

Echis Coloratus
Common Name(s): Saw-Scaled Arabian Viper

Pseudocerastes Persicus
Common Name(s): Persian Horned Viper



Agkistrodon Contortrix



Agkistrodon Piscivorus

PIT VIPER VENOM

Dosage: .032oz(900mg)

DC: 30

Onset: 5D4 Minutes

Duration: 4D4 Hours

Symptoms: Blurred Vision, Convulsions/Seizures, Diarrhea, Discoloration, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Bite), Severe Localized Pain(Bite), Weakness

Damage: Internal Bleeding, 1D4+6 Per Minute

Save: Save Vs Internal Bleeding (Reduces Duration By 90%)

Most poisonous snakes in the United States and tropical regions are pit vipers. Pit vipers are a group of venomous snakes that have deep depressions on each side of the face between the nostril and the eye. These are associated with a membrane that is incredibly sensitive to changes in temperature and serves to detect the presence of infra-red heat. Equipped with the most efficient natural heat receptors in the animal world, these pits allow the snake to sense the heat difference between a small animal and the cooler rocks, plants and other objects in the area. When a warm-blooded animal ventures closer than 20", the snake can detect the prey entirely

CHAPTER 7 - SNAKE VENOMS

by its body heat, even aiming its strike without any other sensory information, in total darkness.

Copperheads: The average copperhead has elliptical eyes, a broad head, and a slender neck. The main scale color is a pale reddish brown or pinkish brown with rich defined reddish-brown or chestnut-brown crossbands, extending laterally. Length ranges from 18" to 30" inches. The tip of the tail is yellowish green or greenish gray. Adult copperhead fangs are relatively short in nature.

Agkistrodon Contortrix
Common Name(s): Northern Copperhead

Agkistrodon Contortrix Contortrix
Common Name(s): Southern Copperhead

Agkistrodon Contortrix Phaeogaster
Common Name(s): Osage Copperhead

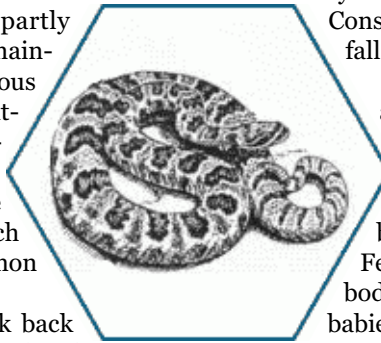
Agkistrodon Contortrix Laticinctus
Common Name(s): Broad-Banded Copperhead

Agkistrodon Contortrix Pictigaster
Common Name(s): Pecos Copperhead

Agkistrodon Contortrix Mokeson

Cottonmouth: Cottonmouth are partly aquatic, living in or near water and feeding mainly on fish and amphibians. These poisonous snakes are usually not aggressive unless agitated or threatened. When angered cottonmouths will coil their bodies and expose a fully opened mouth as if ready to bite. The open mouth exposes a white interior which gives rise to its common name. Other common names are moccasin and water moccasin.

These snakes have a dark olive or black back with a lighter belly. hatchlings are marked by bands with darker borders and paler centers. Their color darkens as they get older, thus the pattern is usually lost or hardly noticeable on adult Cottonmouths. Ancient specimens may also be a uniform black. The snout is usually pale and the eyes are camouflaged by a broad dark facial stripe so that when viewed from on top the eyes cannot be seen and so the head is distinctly broader than the neck. The eyes are also elliptical instead of



Sistrurus Ravus

Agkistrodon Piscivorus
Common Name(s): Cottonmouth, Water Moccasin

Agkistrodon Acutus
Common Name(s): Hundred-Pace Snake

Agkistrodon Piscivorus Conanti
Common Name(s): Florida Cottonmouth

Agkistrodon Halys
Common Name(s): Mamushi

Agkistrodon Piscivorus Piscivorus
Common Name(s): Eastern Cottonmouth

Agkistrodon Hypnale
Common Name(s): Hump-Nosed Viper

Agkistrodon Piscivorus Leucostoma
Common Name(s): Western Cottonmouth

Agkistrodon Rhodostoma
Common Name(s): Malayan Pit Viper

round.

There are numerous subspecies and color variations, but they are all positively identified by the jointed rattles on the tail.

Rattlers get a new rattle segment each time the snake sheds its skin which is normally about 3 to 4 times per year. Hatchling rattlesnakes are born with only one segment on their rattle called a button. This brand new rattle is noiseless until the hatchling rattler sheds its skin for the first time and adds a segment to the button. The rattle makes noise when segments click against each other.

While most of the rattlers are concentrated in the southwestern United States, they extend north, east and south in diminishing numbers and varieties, so that every contiguous state has one or more varieties. At higher elevations, and in the fall, rattlesnakes congregate at crevices in rocky ledges to hibernate for the winter, often returning to these places annually. These spots are known as snake dens. When temperatures begin to warm in May and early June, snakes come out of hibernation. They remain near the den entrance for a few days, sunning themselves. They then make their way to where they will spend the summer, rarely more than a mile from their dens. Most rattlers are secretive in their summer activities, hunting at night and remaining inactive and out of sight for days at a time during the digestive period after eating. Consequently, more snakes are seen in the spring and fall migrations to and from their winter homes.

Ideal habitats are where there is a constant, abundant supply of small rodents. Well fed snakes sometimes attain a length of 5', but the average adult size is between 3' and 4'.

Eggs are retained in the rattlesnake mother's body until hatched, and the young are born alive. Female rattlers killed with the young still in the body gave rise to the folk tale that they swallow their babies to protect them from danger. A female rattler may contain from 4 to 25 (3D8+1) eggs, from which an average of 9 or 10 hearty young are born live.

Crotalus Adamanteus
Common Name(s): Eastern Diamondback Rattlesnake

Crotalus Cerastes Laterorepens
Common Name(s): Colorado Desert Sidewinder

Crotalus Atrox
Common Name(s): Western Diamondback Rattlesnake

Crotalus Durissus Durissus
Common Name(s): Central American Rattlesnake

Crotalus Basiliscus Basiliscus
Common Name(s): Mexican West-Coast Rattlesnake

Crotalus Durissus Culminatus
Common Name(s): Northwestern Neotropical Rattlesnake

Crotalus Basiliscus Oaxacus
Common Name(s): Oaxacan Rattlesnake

Crotalus Durissus Terrificus
Common Name(s): South American Rattlesnake

Crotalus Catalinensis
Common Name(s): Santa Catalina Island Rattlesnake

Crotalus Durissus Totonacus
Common Name(s): Totonacan Rattlesnake

Crotalus Cerastes Cerastes
Common Name(s): Mojave Desert Sidewinder

Crotalus Enyo Enyo
Common Name(s): Lower California Rattlesnake

Crotalus Cerastes Cercobombus
Common Name(s): Sonoran Desert Sidewinder

Crotalus Enyo Cerralvensis
Common Name(s): Cerralvo Island Rattlesnake

Rattlesnakes: Rattlesnakes come in 16 distinct varieties.

CHAPTER 7 - SNAKE VENOMS

Crotalus Exsul
Common Name(s): Cedros Island Diamond Rattlesnake

Crotalus Horridus Horridus
Common Name(s): Timber

Crotalus Horridus Atricaudatus
Common Name(s): Canebrake Rattlesnake

Crotalus Intermedius Intermedius
Common Name(s): Totalcan Small-Headed Rattlesnake

Crotalus Lepidus Lepidus
Common Name(s): Mottled Rock Rattlesnake

Crotalus Lepidus Klauberi
Common Name(s): Banded Rock Rattlesnake

Crotalus Lepidus Morulus
Common Name(s): Tamaulipan Rock Rattlesnake

Crotalus Mitchelli Mitchelli
Common Name(s): San Lucan Speckled Rattlesnake

Crotalus Mitchelli Pyrrhus
Common Name(s): Southwestern Speckled Rattlesnake

Crotalus Mitchelli Stephensii
Common Name(s): Panamint Rattlesnake

Crotalus Molossus Molossus
Common Name(s): Northern Black-Tailed Rattlesnake

Crotalus Molossus Nigrescens
Common Name(s): Mexican Black-Tailed Rattlesnake

Crotalus Polystictus
Common Name(s): Mexican Lance-Headed Rattlesnake

Crotalus Pricei Pricei
Common Name(s): Twin-Spotted Rattlesnake

Crotalus Ruber Ruber
Common Name(s): Red Diamond Rattlesnake

Crotalus Ruber Lucasensis
Common Name(s): San Lucan Diamond Rattlesnake

Crotalus Scutulatus Scutulatus
Common Name(s): Mojave Rattlesnake

Crotalus Scutulatus Salvini
Common Name(s): Huamantlan Rattlesnake

Crotalus Stejnegeri
Common Name(s): Long-Tailed Rattlesnake

Crotalus Tigris
Common Name(s): Tiger Rattlesnake

Crotalus Tortugensis
Common Name(s): Tortuga Island Diamond Rattlesnake

Crotalus Unicolor
Common Name(s): Aruba Island Rattlesnake

Crotalus Vegrandis
Common Name(s): Uracoan Rattlesnake

Crotalus Viridis Abyssus
Common Name(s): Grand Canyon Rattlesnake

Crotalus Viridis Caliginis
Common Name(s): Coronado Island Rattlesnake

Crotalus Viridis Cerberus
Common Name(s): Arizona Black Rattlesnake

Crotalus Viridis Decolor
Common Name(s): Midget Faded Rattlesnake

Crotalus Viridis Helleri
Common Name(s): Southern Pacific Rattlesnake

Crotalus Viridis Lutosus
Common Name(s): Great Basin Rattlesnake

Crotalus Viridis Nuntius
Common Name(s): Hopi Rattlesnake

Crotalus Viridis Oreganus
Common Name(s): Northern Pacific Rattlesnake

Crotalus Viridis Viridis
Common Name(s): Prairie Rattlesnake

Crotalus Willardi Willardi
Common Name(s): Arizona Ridge-Nosed Rattlesnake

Crotalus Willardi Silus
Common Name(s): Chihuahuan Ridge-Nosed Rattlesnake

Sistrurus Catenatus Catenatus
Common Name(s): Eastern Massasauga

Sistrurus Catenatus Edwardsii
Common Name(s): Desert Massasauga

Sistrurus Catenatus Tergeminus
Common Name(s): Western Massasauga

Sistrurus Miliaris Miliaris
Common Name(s): Carolina Pigmy Rattlesnake

Lanceheads: Lanceheads are a special type of pit viper found in the tropics. Their heads are triangular, pointed and resemble the head of a spear, giving this species its common name. The common adult lancehead measures 4' to 7' long, usually brown, reddish-brown, olive, green or grayish-brown in color with large, dark, pale triangles on the sides of its body. These are excellent camouflage shades and make this animal difficult to see, causing -5 to Spot checks and other mundane observational skill checks.

Lanceheads inhabit lowland areas of tropical jungles, in open and wooded areas, and along forest edges. In drier regions, the lancehead also may occur along major rivers. Young lanceheads feed on lizards, adults mainly eat small mammals and birds, rodents, lizards and smaller snakes. The lancehead relies on its quality camouflage and the pit organ to hunt this prey. Young lanceheads wiggle the tips of their yellow tails to lure small mammals and birds, while adults lurk and hunt among ground plants or wait for prey.

The female lancehead gives birth to a litter of up to 80(8D10) live young. These hatchlings are about 1' in length and are born with fully functioning venom glands.

Lanceheads are known to be very aggressive, and the habit of lying in trails to wait for prey, or invading plantations in search of rodents cause the majority of venomous snakebites.

Bothrops Alternatus
Common Name(s): Urutu, Yarara

Bothrops Alticola
Common Name(s): Parker's Pit Viper

Bothrops Andianus
Common Name(s): Andean Pit Viper

Bothrops Asper
Common Name(s): Terciopelo

Bothrops Atrox
Common Name(s): Barba Amarilla

Bothrops Barbouri
Common Name(s): Barbour's Pit Viper

Bothrops Barnetti
Common Name(s): Barnett's Pit Viper

Bothrops Bicolor
Common Name(s): Bocourt's Pit Viper

Bothrops Bilineatus Bilineatus
Common Name(s): Amazonian Tree-Viper

Bothrops Brazili
Common Name(s): Brazil's Pit Viper

Bothrops Caribbeaus
Common Name(s): St. Lucia Pit Viper

Bothrops Cotiara
Common Name(s): Cotiara

Bothrops Dumni
Common Name(s): Dunn's Pit Viper

Bothrops Fonsecai
Common Name(s): Fonseca's Pit Viper

Bothrops Godmanni
Common Name(s): Godmann's Pit Viper

Bothrops Insularis
Common Name(s): Island Jararaca

Bothrops Jararaca
Common Name(s): Jararaca

Bothrops Jararacussu
Common Name(s): Jararacussu

Bothrops Lanceolatus
Common Name(s): Fer-De-Lance

Bothrops Lansbergii
Common Name(s): Lansberg's Hog Nose Viper

Bothrops Lateralis
Common Name(s): Yellow-Lined Pit Viper

Bothrops Melanurus
Common Name(s): Black-Tailed Pit Viper

Bothrops Nasutus
Common Name(s): Hog-Nosed Pit Viper

Bothrops Neuwiedi
Common Name(s): Jararaca Pintada, Wied's Lance-Head

CHAPTER 7 - SNAKE VENOMS

Bothrops Nigroviridis Nigroviridis
Common Name(s): Black Spotted Pit Viper

Trimeresurus Flavoviridis
Common Name(s): Common Name(s): Habu

Bothrops Nummifer
Common Name(s): Jumping Viper

Trimeresurus Gramineus
Common Name(s): Green Tree Viper

Bothrops Orphryomegas
Common Name(s): Western Hog-Nosed Pit Viper

Trimeresurus Monticola
Common Name(s): Chinese Mountain Viper

Bothrops Peruvianis
Common Name(s): Peruvian Pit Viper

Trimeresurus Mucrosquamatus
Common Name(s): Chinese Habu

Bothrops Pirajai
Common Name(s): Piraja's Pit Viper, Jararacucu

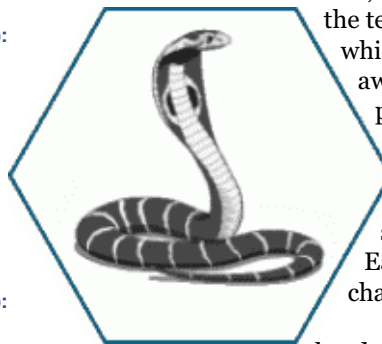
Trimeresurus Okinavensis
Common Name(s): Himehabu

Bothrops Schlegelii
Common Name(s): Eyelash Viper

Bothrops Yucatanicus
Common Name(s): Yucatan Pit Viper

Trimeresurus Popeorum
Common Name(s): Pope's Habu

Trimeresurus Albolabris
Common Name(s): White-Lipped Tree Viper



Naja Haje

Duration: 2D6 Days
Symptoms: Blurred Vision, Convulsions/Seizures, Diarrhea, Discoloration, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Bite), Severe Localized Pain(Bite), Weakness
Damage: Coma, Paralyzation, Shock, 2D6 Per Hour
Save: Save Vs Coma, Reduce Duration By 85%

Coral Snakes: The coral snake envenoms with a pair of small, fixed, fangs. Venom is delivered via grooves in the teeth, rather than injected by hypodermic action, which is why coral snakes like to hang on for awhile. Unlike vipers, such as rattlesnakes, copperheads, and cottonmouths, which strike quickly, coral snakes MUST hang on for an additional round to achieve significant envenomation. The first successful attack means the snake has attached to the flesh of the target. Each round that the coral is attached gives a chance to envenom.

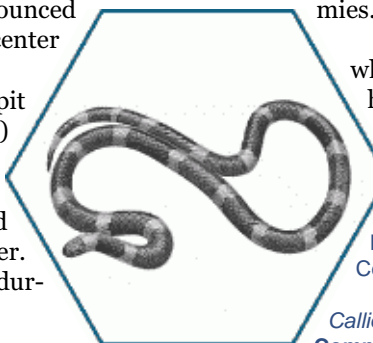
Coral Snakes are rather tiny, with a small head, and grow only 13" to 22" in length with a girth about the size of a pencil. A coral snake is normally recognized by its wide red and black bands and narrow yellow and white rings completely encircling its body. Several other snakes mimic this coloration, most notably the Scarlet Kingsnake (*Lampropeltis Triangulum*), but the coral snake is the only snake with red bands bordered by white or pale yellow.

Coral snakes are nocturnal in habit and are most likely to be out after summer rains, when few animals are present. Coral snakes are very secretive, spending most of their lives under rocks or buried in the soil.

Its bright coloration serves as a warning to predators, but if provoked, it will bury its head in the coils of its body and raise its tail to expose the underside. The coral snake then contracts its tail muscles and making a popping sound to startle enemies.

Bushmasters: Bushmasters are found in relatively cool, moist tropical forests from mountainous areas to coastal lowlands. This species is the largest of all venomous snakes in the Americas and the longest pit viper in the world, sometimes reaching a length of 12'. As with other members of its subfamily, the bushmaster has hinged fangs that lie flat on the roof of the mouth when not in use. Because of this adaptation, their fangs can be very long, reaching as much as 1.4" in a large individual. Their bodies are slightly flattened, with broad, wedge-shaped heads and a short tail ending in a bony spur. When agitated, they may shake their tail tip against foliage to make a threatening sound. They have a light tan background color with large, darker brown to black diamond-shaped patterns on their backs. Their scales are bumpy, with a pronounced ridge of hard, sharp scales running down the center of their back.

The bushmaster is the only egg-laying pit viper in the Americas, laying 6 to 12 (2D4+4) eggs, each of which is white and slightly larger than a chicken egg. After laying her eggs, the female coils her body around them and guards them until they hatch 76-79 days later. She will not leave her eggs, not even to hunt, during the hatching period.



Micrurus Fulvius

Lachesis Muta
Common Name(s): Bushmaster

Common Name(s): Plato Negro

Lachesis Muta Rhombeata
Common Name(s): Coastal Bushmaster

Lachesis Stenophrys
Common Name(s): Central American Bushmaster

Lachesis Muta Melanocephala

ELAPIDAE VENOM

Dosage: .007oz(200mg)

DC: 22

Onset: 2D6 Minutes

Females lay 2 or 3 eggs in the late summer which take about 10 weeks of incubation before hatching. Upon emerging, the young are 7" to 8" long.

Calliophis Japonicus
Common Name(s): Japanese Coral Snake
Striped Red Snake
Micruroides Euryxanthus
Common Name(s): Sonoran Coral Snake

Calliophis Kelloggi
Common Name(s): Kellogg's Coral Snake
Micrurus Frontalis
Common Name(s): Brazilian Coral Snake

Calliophis Nigrescens
Common Name(s): Black Climbing Coral Snake
Micrurus Fulvius
Common Name(s): Common Coral Snake

Calliophis Sauteri Hatori
Common Name(s): Oriental Coral Snake
Micrurus Fulvius Fulvius
Common Name(s): Eastern Coral Snake

Calliophis Sauteri Sauteri
Common Name(s): Asia Coral Snake, Sauters Coral Snake,
Micrurus Fulvius Tenere
Common Name(s): Texas Coral Snake

CHAPTER 7 - SNAKE VENOMS

Cobras: Some cobras are the longest venomous snakes in the world. Though most cobras average no more than 6' in length, the king cobra (*Ophiophagus Hannah*) can attain a length of 18', longer than most crocodiles. These snakes are active by day, moving silently through vegetation and deliberately avoiding disturbances. If a cobra is startled, it will rear its head and while swaying back and forth, ribs in the neck flatten out, expanding the folds of skin and creating a long, narrow hood. This is intended to intimidate an intruder. If an intruder does not leave when warned the cobra will strike quickly. The cobras bite, while effective against most animals, is little use against birds of prey, which swoop down from behind to strike the back of the snake's head. Cobras will hide in thickets to avoid these deadly enemies.

Cobra females will lay 2-20 (2D10) eggs about once per year. Females seek out secluded spots for laying, then excavates a shallow, circular depression in the ground up to 3" in diameter. There she deposits 40 to 50 eggs and remains on or near the nest until they hatch in 70 to 77 days. The female defends her nest site aggressively. The male may also stay close by for a while to assist in defense. When the eggs hatch, the hatchlings are 12" to 25" long. Their venom, produces in small quantities, is just a powerful as an adults. As soon as all the young snakes have hatched, the female leaves. Cobras have few natural enemies as adults, but the hatchlings have many. They are preyed upon by civet cats, army ants, and giant centipedes, and the eggs may be eaten or trampled by a wild boar or a mongoose.

Even given its dangerous properties, the cobra still remains the favourite of snake charmers. It is not, however, the music of their flutes that catches the attention of the cobra, but rather the movement of the flute itself. From ancient times these snake charmers have put their lives at risk. It is vital that they know their snakes well and exactly how far they can manipulate them.

Boulengerina Annulata
Common Name(s): Banded Water Cobra

Hemachatus Haemachatus
Common Name(s): Ringhal

Naja Anchietae
Common Name(s): Anchita's Cobra

Naja Haje
Common Name(s): Brown Cobra, Egyptian Cobra

Naja Melanoleuca
Common Name(s): Black Cobra, Forest Cobra

Naja Naja Atra
Common Name(s): Chinese Cobra, Taiwan Cobra

Naja Naja Kaouthia
Common Name(s): Monocellate Cobra

Naja Naja Naja
Common Name(s): Cobra De Capello, Indian Cobra

Naja Naja Oxiana

Common Name(s): Central Asian Cobra

Naja Naja Phillipinensis
Common Name(s): Philippine Cobra

Naja Naja Sputatrix
Common Name(s): Malayan Cobra

Naja Nivea
Common Name(s): Cape Or Yellow Cobra

Ophiophagus Hannah
Common Name(s): King Cobra

Paranaja Multifasciata
Common Name(s): Burrowing Cobra

Pseudohaje Nigra
Common Name(s): Black Tree Cobra

Pseudohaje Goldii
Common Name(s): Gold's Tree Cobra

Walterinnesia Aegyptia
Common Name(s): Desert Cobra, Desert Blacksnake

Spitting Cobras: The fangs of spitting cobras resemble those of other cobras, but the opening through which the venom flows out of the fangs are much smaller, closer to the base of the fang, rounded rather than elongated in shape, and the venom canal inside the fang reaches the outlet at a right angle to the tooth. When the venom gland is compressed, the narrower outlet creates greater pressure to build up, forcing the venom to spray out in tiny droplets. The snake then blows air out through the mouth by collapsing its lungs. The venom droplets are directed outwards in a pair of fine sprays up to a range of 8'. Spitting cobras are very accurate at short range and aim for the eyes, gaining a +2 at half-range or less. The venom doesn't cause any harm on unbroken skin, but The target must make a Reflex Save or be blinded for 2D6 hours. Unless it is rinsed out immediately, extensive damage to the cornea will cause permanent blindness. Spitting cobras usually flee after spitting.

Naja Nigricollis
Common Name(s): Spitting Cobra

Naja Nigricollis Massambique
Common Name(s): Red Spitting Cobra

Kraits: The kraits are highly venomous snakes found in Southeast Asia. The common krait has a darkly colored body with thin white bands that are absent in their anterior and can reach a maximum length of 6'. Kraits feed on small mammals, lizards, frogs and toads, but since their fangs are not very long, kraits inject their venom by chewing. Fortunately these snakes are quiet and inoffensive in disposition, and the krait bites only under severe provocation.

The krait is essentially a snake of the plains, usually found in open country, cultivated areas and scrub jungles at low levels. In spring the females find shelter in large stones or trees and lay from 6 to 12 (2D4+4) eggs, which she deposits in holes in the ground or under leaves. She stays with the clutch until the young emerge 60 to 65 days later.

Bungarus Caeruleus
Common Name(s): Blue Krait

Bungarus Flaviceps
Common Name(s): Red-Headed Krait

Bungarus Candidus
Common Name(s): Malayan Krait

Bungarus Multicinctus
Common Name(s): Formosan Krait

Bungarus Fasciatus
Common Name(s): Banded Krait

Mambas: The scales of mambas are darkly colored, as is the lining of the mouth. The head is also distinctive in being narrowly shaped and having round eyes with round pupils. Mambas are known for being aggressive when agitated or confronted and will strike with deadly precision. The average length of a specimen varies between 6' to 7', but an exceptional case was recorded of 13.5'. This snake has quite a large distribution in Africa. They are, however, absent from equatorial forests and desert areas. They prefer more open bush and savanna at low attitudes.

Females deposit a batch of 8 to 17 (3D4+5) oval shaped eggs in shallow pits that hatch in 80-90 days. The hatchlings are usually dark in color and measure between 6" to 27" in length.

CHAPTER 7 - SNAKE VENOMS

Dendroaspis Angusticeps
Common Name(s): Eastern Green Mamba

Common Name(s): Jameson's Eastern Mamba

Dendroaspis Jamesoni Jamesoni
Common Name(s): Jameson's Southern Mamba

Dendroaspis Polylepsis
Common Name(s): Black Mamba

Dendroaspis Viridis
Common Name(s): Western Green Mamba

Dendroaspis Jamesoni Kaimosae

Pseudechis Papuanus
Common Name(s): Papuan Black Snake

Pseudechis Porphyriacus
Common Name(s): Red-Bellied Black Snake

Pseudonaja Textilis

Common Name(s): Eastern Brown Snake
Tropidechis Carinatus
Common Name(s): Rough-Scaled Snake

Pseudechis Australis
Common Name(s): King Brown/Mulga Snake

Tiger Snakes: Mainland tiger snakes, as well as those found on the large offshore islands, hardly vary in size. Mainland tiger snakes come with exceptional color variations and are mainly banded. These bands can be shades of brown, grey, olive, green and creamy yellow. Occasionally unbanded brown or black specimens are found. Island tiger snakes are predominantly black. On Chappell Island they can vary to olive brown. On Roxby and Reevesby Islands they are black.

Tiger snakes frequent the cool areas of Australia. All of them have this in common, some live in swamps while others live on islands. Common tiger snakes live in wet areas where there are plenty of frogs. Tiger snakes eat anything that moves, but they love to eat frogs. Their young even eat tadpoles and baby frogs. Tiger snakes are relatively sluggish by nature and swampy areas have plenty of frogs that are far easier to catch than the fast-moving small mammals such as rats and mice.

Notechis Ater Ater
Common Name(s): Krefft's Tiger Snake

Notechis Ater Serventyi
Common Name(s): Chappell Island Tiger Snake

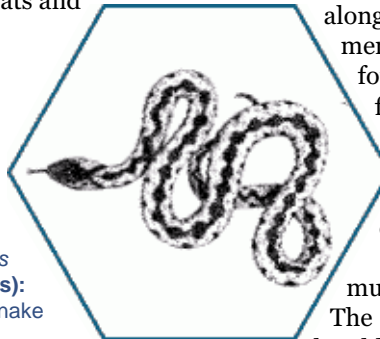
Notechis Ater Humphreysi
Common Name(s): King Island Tiger Snake

Notechis Scutatus
Common Name(s): Common Tiger Snake

Notechis Ater Niger
Common Name(s): Peninsula Tiger Snake, Southern Tiger Snake

Notechis Scutatus Scutatus
Common Name(s): Australian Tiger Snake

Notechis Ater Occidentalis
Common Name(s): Western Australian Tiger Snake



Notechis Ater Niger

Taipans: Taipans average 4.75' in length, are fast, nervous, and undeniably intelligent. Taipans combine their paranoid nature with one of the most potent venom cocktails in the world, and the longest fangs of any elapid snake. They will strike readily at the slightest disturbance, and can literally launch themselves off the ground toward the source of the agitation. The Australian taipan (*Oxyuranus Scutellatus Scutellatus*) enjoys the reputation of a 100% mortality rate in human snakebite victims.

Taipans mate between May and October, with females producing 1-2 clutches each season. Clutch sizes can range from 8 to 22 (2D8+6) eggs, and incubate in 56-66 days.

Hoplocephalus Bungaroides
Common Name(s): Broad-Headed Snake

Oxyuranus Scutellatus Canni
Common Name(s): Papua Taipan

Oxyuranus Microlepidotus
Common Name(s): Inland Taipan

Oxyuranus Scutellatus Scutellatus
Common Name(s): Australian Taipan

Demansia Papuensis
Common Name(s): Papuan Whip Snake

Demansia Psammophis
Common Name(s): Spotted-Headed Snake, Yellow-Faced Whip Snake

False Garters: Generally, you can recognize these uncommon snakes by the pattern of yellow stripes on a black or brown background. Although the pattern is variable, it usually consists of a narrow stripe down the middle of the back and a broad stripe on each side. Between the center and each side stripe are two rows of alternating black spots.

These snakes occupy a variety of habitats including pond and stream edges, wetlands, forests, fields, rocky hillsides and residential areas. They are often observed as they bask on rocks, wood piles, stone walls, and hedges. Although they feed on a variety of small animals, primary prey are earthworms and amphibians.

Elaps Lacteus
Common Name(s): Dwarf Garter Snake

Elapsoidea Sundervallii
Common Name(s): Bush Garter

False Adders: These Elapids seem to have had convergent evolution with the Viperidae family. Death adders are characterised by a broad somewhat flattened, triangular head, short stout body and a thin rat-like tail ending in a curved soft spine. This spine separates the Death Adders from all other Australasian elapids.

Acanthophis Antarcticus Antarcticus

Common Name(s): Common Death Adder

Common Name(s): Eastern Death Adder

Acanthophis Antarcticus Laevis

Acanthophis Pyrrhus
Common Name(s): Desert Death Adder

Whip Snakes: Specimens range in color from gray, green, and yellow, often with red markings running along the back. Average length is 25.5", but specimens of over a 39" are known. Whip Snakes are found in all types of habitat, moving swiftly and feeding principally on lizards. When inactive this species hides under ground litter such as rocks, logs, bark, etc. Male combat occurs during the mating season, but is not necessarily directly connected with mating.

A female lays 3 to 9 (2D4+1) eggs, often communally with up to 7 other females, in summer. The eggs take about 8-9 weeks to hatch and the hatchlings measure 5".

CHAPTER 7 - SNAKE VENOMS

COLUBRID VENOM

Dosage: .02oz(560mg)

DC: 37

Onset: 2D2 Minutes

Duration: 1D4 Hours

Symptoms: Blurred Vision, Convulsions/Seizures, Diarrhea, Discoloration, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/Vomiting, Numbness, Rapid Pulse, Swelling (Bite), Severe Localized Pain(Bite), Weakness

Damage: Cardiac Failure 3D30+20, 1D4+6 Per Minute

Save: Save Vs Cardiac Failure (Reduces Damage by 50%), Reduce Duration By 60%

Colubrids form the main proportion (66%) of the snake species in all major regions of the world with the exception of Australia, where the front-fanged snakes predominate. Although most colubrids are non-venomous, a few possess enlarged and often grooved teeth on the rear of the upper jaw to enable toxic secretions to be introduced into the body of a prey or an enemy.

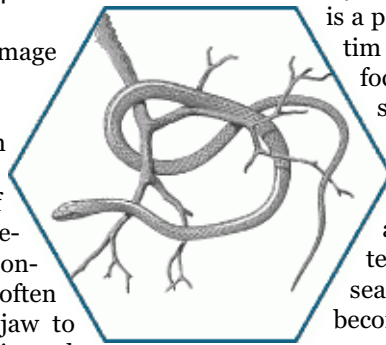
The Boomsnang and Twig Snake are usually found in trees. The Boomsnang is green or brown while the twig snake blends in with dry twigs and will remain motionless when disturbed, camouflaging itself to be a twig, hence the name. Both these snakes are lethal to humans. There is antivenin for the Boomsnang but can only be ordered by doctors on request. There is no antivenin against the bite of a twig snake. Twig snake venom creates blood clotting in victims, creating a need for blood transfusions and renders traditional antivenins useless. Fortunately for most the twig snake is not an aggressive snake and will flee when actively approached.

Dispholidus Typus

Common Name(s): Boomsnang, Twig Snake

Thelotornis Kirtlandii

Common Name(s): Bird Snake



Dispholidus Typus

SEA SNAKE & KRAIT VENOM

Dosage: .00007oz(2mg)

DC: 22

Onset: 2D6 Minutes

Duration: 2D6 Days

Symptoms: Blurred Vision, Convulsions/Seizures, Diarrhea, Discoloration, Dizziness, Excessive Sweating, Fainting, Fever, Incoordination, Intense Thirst, Nausea/ Vomiting, Numbness, Rapid Pulse, Swelling (Bite), Severe Localized Pain(Bite), Weakness

Damage: Coma, Paralyzation, Shock, 2D6 Per Hour

Save: Save Vs Coma, Reduce Duration By 85%

There are roughly fifty species of true sea snakes and five species of Sea Kraits. The biggest difference between the two is that kraits return to the land to lay their eggs.

Both kraits and sea snakes have adapted to marine life. Their tails are flattened for swimming. They have glands in their mouths that remove and excrete salt from the seawater that they happen to swallow. Their nostrils close when they

submerge and they have special scales that shield their mouths. A sea snake has one lung that extends the length of its body and it's used like a reserved air sac and for buoyancy control. Sea snakes can also absorb oxygen from the water through their skin and stay submerged for about two hours if necessary.

Some have generalized diets and others only feed on specific prey. Like its land cousins, a sea snake can unhinge its jaw to feed. The most remarkable thing about sea snakes is their venom. Little of it is transferred to the victim and only one-fourth of those bitten show signs of poisoning, so poisoning will

only occur on a natural attack roll of 16 to 20. The venom is a paralyzing agent to the nervous system and the victim becomes unable to breathe, often resulting in a suffocation death. They may have small mouths, but sea snakes can and will bite people when provoked.

Sea Snake are very docile creatures, preferring to simply swim away if in trouble. Most sea snake bites occur on fishing trawlers, when the snakes are sometimes hauled in with a net of fish. They do tend to be aggressive only during the winter mating season. The sea snake is also very curious, and become fascinated by long, thin objects, such as high pressure hoses. Provoked snakes seeking mates can become very aggressive and persistent.

Yellow-Lipped Sea Kraits are not true sea snakes. Though they forage in the ocean for eels, they return to shore to digest prey, shed skins, mate, and lay eggs. True sea snakes never go ashore, and give birth to live young out at sea. Despite the fact that their venom is powerful enough to kill with one bite, the snakes are unusually docile in nature and are highly tolerant of people. The yellow-lipped sea krait is so tame that the venomous animals can be collected by the handful.

Acalyptophis Peronii

Common Name(s): Horned Sea Snake

Sea Snake

Astrotia Stokesii

Common Name(s): Stokes's Sea Snake

Aipysurus Apraefrontalis

Common Name(s): Short-Nosed Sea Snake

Disteira Kingii

Common Name(s): Spectacled Sea Snake

Aipysurus Duboisii

Common Name(s): Dubois's Sea Snake, Reef Shallows Sea Snake

Disteira Major

Common Name(s): Olive-Headed Sea Snake

Aipysurus Eydouxii

Common Name(s): Spine-Tailed Sea Snake, Stagger-Banded Sea Snake

Emyocephalus Annulatus

Common Name(s): Turtle-Head Sea Snake

Enhydrina Schistosa

Aipysurus Foliosquama

Common Name(s): Leaf-Scaled Sea Snake

Enhydrina Schistosa

Common Name(s): Beaked Sea Snake

Aipysurus Fuscus

Common Name(s): Dusky Sea Snake

Ephalophis Greyi

Common Name(s): North-Western Mangrove Sea Snake

Aipysurus Laevis

Common Name(s): Golden Sea Snake, Olive Sea Snake

Hydreleps Darwiniensis

Common Name(s): Black-Ringed Mangrove Sea Snake

Aipysurus Tenuis

Common Name(s): Brown-Lined

Hydrophis Atriceps

Common Name(s): Black-Headed Sea Snake

POISON/VENOM	Type	Page	POISON/VENOM	Type	Page
Abrin	I	62	Evomonoside	I	63
Acanthaster	P	40	Eycorine	I	63
Acanthurus	P	40	Formaldehyde	P/I/D/V	29
Acetylcholine	I	62	Frohnide	I	63
Aconitine	I	62	Fuel Oil	P/I/V	29
Acutumine	P/I	62	Githagine	I	63
Amanitin	P/I	39	Glucosinola	P/I	63
Ammonia	P/I/V	26	Gyrienide	I	63
Amygdalin	I	62	Gyromitrin	I	39
Anagryne	I	62	Hapalochlaena	P	43
Androctonus Amoreuxi	P/V	15	Helenalin	I	63
Androctonus Australis	P/V	15	Heliosupine	I	63
Androctonus Bicolor	P	15	Hemiscorpius Lepturus	P	18
Androctonus Crassicauda	P	16	Hexane	P/I/V	29
Androctonus Mauritanicus	P	16	Hortus	I	63
Antirrinocide	I	62	Hottentota Saulcyi	P	18
Arbaciidae	P	40	Hydrocyanic Acid	P/I/V	29
Arsenic Trioxide	P/I/V	26	Hydrogen Peroxide	P/I	29
Atrax			Hyoscyamine	I	64
Male Venom	P/D	22	Ingenol	I	64
Female Venom	P	22	Inosae	I	64
Atropine	I	62	Intermedine	P/I	64
Baeceria	I	62	Isoflavide	I	64
Bakantin	I	62	Isophorone	P/I/V	30
Balistidae	P	41	Jervine	I	64
Baptisin	I	62	Kerato	I	64
Barium Carbonate	P/I	26	Krait(Sea Snake)	P/I/V	75
Belladonna	I	62	Lactine	I	64
Benzene	I/V	26	Latroedectus	P	23
Buthacus Leptocheilis	P	16	Leiurus Quinquestriatus	P	18
Buthus Occitanus Tunetanus	P	16	Lobeline	P/I	64
Buthus Parabuthus	P	16	Locamide	P/I	64
Buthus Parabuthus Transvaalicus	P/V	17	Locamine	P/I	64
Calodine	I	62	Locane	P/I	64
Carbon Oxychloride	P/I/V	26	Lophozozymus Pictor	P/I	44
Carbon Tetrachloride	P/I/V	27	Loxosceles	P	24
Centruroides Exilicauda	P	17	Lucosinolate	I	64
Centruroides Noxius	P	17	Malacia	I	64
Centruroides Suffusus	P	17	Malathion	P/I/V	30
Centruroides Limpidus	P	18	Mesobuthus Eupeus	P	19
Cheiracanthium	P	22	Methyl Isocyanate	P/I/V	30
Chelidonine	I	62	Methyl Trichloride	P/I/V	30
Chironex Fleckeri	P	41	Methylphosphonofluoridate-Pinacolyl	D/V	30
Chiropsalmus Quadrigatus	P	42	Methylphosphonothiolate-Diisopropyl	pyl D/V	30
Cicutol	P/I	62	Methylfluorophosphonate-Isopropyl	D/V	31
Cirotine	I	62	Mitinate	I	64
Colicine	I	62	Muscarine	I	39
Colubrid	P/I/V	75	Muscimol (Ibotenic Acid)	I	39
Compsobuthus Acuticarinatus	P	18	Mustard Gas	D/V	31
Conubide	I	63	Naphthalene	P/I/V	31
Conus	P	42	Nicotine	I	64
Coprine	I	39	Nitrobenzene	P/I/V	31
Cyanide(Organic)	P/I	63	Nycoride	I	64
Cyclamin	I	63	Odontobuthus Doriae	P	19
Cyrotine	I	63	Oleandrin	P/I	64
Cytisine	I	63	Ontianin	I	65
Dasyatis	P	43	Opisthophthalmus Glabrifons	P	19
Deoxyin	I	63	Opium	P/I/D/V	65
Dichlorodiphenyltrichloroethane	P/I/D/V	27	Oranine	I	65
Digitalis	I	63	Orellanine/Orelline	I	39
Dimethyl Benzene	P/I/D/V	28	Osinol	I	65
Dimethyl Ketone	P/I/D/V	28	Ostraciidae	P/I/D/V	44
Dimethylphosphoramido-Cyanidate	D/V	28	Oxalate(Oxalic Acid)	I	65
Diterpinol	I	63	Oxynenol	I	65
Elapidae	P/I/V	72	Palustrine	I	65
Ethylene Glycol	P/I/V	28	Paresthesine	I	39
Ethylene Monochloride	V	28	Pentachlorophenol	P/I	32

POISON/VENOM	Type	Page
Phoneytria	P	24
Physalia	P	44
Phytolagen	I	65
Pit Viper	P/I/V	69
Propylene Glycol(see Ethylene Glycol)		
Prunasin	I	65
Prussic Acid	I	65
Psilocybin	I	39
Pyrrrolizidine	P/I	65
Quinone	I	65
Ranunculin	P/I/D	65
Rhoeadine	I	65
Ricin	P/I/D/V	65
Sanguinarine	I	65
Saponin	I	65
Scorpaenidae	P/I	45
Selenocosmia	P	25
Senecionine	I	66
Seride	I	66
Siganus	P	47
Sodium Hydroxide	P/I/V	32
Sodium Hypochlorite	P/I/V	32
Strychnine	I	66
Taxiphillin	I	66
Tegenaria Agrestis	P	25
Telouine	I	66
Tengenol	I	66
Terpene	P/I/V	32
Terraodontinae	P/I	47
Tetrachloroethylene	P/I	32
Thermopsine	I	66
Thymela	I	66
Tityus Bahiensis	P	19
Tityus Serrulatus	P	20
Tityus Trinitatis	P	20
Troente	I	66
Tyloside	I	66
Ukonine	I	66
Urushiol	P/I/D/V	66
Vincristine	I	66
Viperidae	P/I/V	68
Voxyin	I	66
Xolate	P/I	66
Xyphorbol	I	66
Zygacine	P/I	66

OPEN GAME LICENSE Version 1.0a

The following text is the property of Wizards of the Coast, Inc. and is Copyright 2000 Wizards of the Coast, Inc ("Wizards"). All Rights Reserved.

1. Definitions: (a) "Contributors" means the copyright and/or trademark owners who have contributed Open Game Content; (b) "Derivative Material" means copyrighted material including derivative works and translations (including into other computer languages), potation, modification, correction, addition, extension, upgrade, improvement, compilation, abridgment or other form in which an existing work may be recast, transformed or adapted; (c) "Distribute" means to reproduce, license, rent, lease, sell, broadcast, publicly display, transmit or otherwise distribute; (d) "Open Game Content" means the game mechanic and includes the methods, procedures, processes and routines to the extent such content does not embody the Product Identity and is an enhancement over the prior art and any additional content clearly identified as Open Game Content by the Contributor, and means any work covered by this License, including translations and derivative works under copyright law, but specifically excludes Product Identity. (e) "Product Identity" means product and product line names, logos and identifying marks including trade dress; artifacts; creatures characters; stories, storylines, plots, thematic elements, dialogue, incidents, language, artwork, symbols, designs, depictions, likenesses, formats, poses, concepts, themes and graphic, photographic and other visual or audio representa-

tions; names and descriptions of characters, spells, enchantments, personalities teams, personas, likenesses and special abilities; places, locations, environments creatures, equipment, magical or supernatural abilities or effects, logos, symbols, or graphic designs; and any other trademark or registered trademark clearly identified as Product Identity by the owner of the Product Identity, and which specifically excludes the Open Game Content; (f) "Trademark" means the logos, names, mark sign, motto, designs that are used by a Contributor to identify itself or its products or the associated products contributed to the Open Game License by the Contributor (g) "Use", "Used" or "Using" means to use, Distribute, copy, edit, format, modify, translate and otherwise create Derivative Material of Open Game Content. (h) "You" or "Your" means the licensee in terms of this agreement.

2. The License: This License applies to any Open Game Content that contains a notice indicating that the Open Game Content may only be Used under and in terms of this License. You must affix such a notice to any Open Game Content that you Use. No terms may be added to or subtracted from this License except as described by the License itself. No other terms or conditions may be applied to any Open Game Content distributed using this License.

3. Offer and Acceptance: By Using the Open Game Content You indicate Your acceptance of the terms of this License.

4. Grant and Consideration: In consideration for agreeing to use this License, the Contributors grant You a perpetual, worldwide, royalty-free, non-exclusive license with the exact terms of this License to Use, the Open Game Content.

5. Representation of Authority to Contribute: If You are contributing original material as Open Game Content, You represent that Your Contributions are Your original creation and/or You have sufficient rights to grant the rights conveyed by this License.

6. Notice of License Copyright: You must update the COPYRIGHT NOTICE portion of this License to include the exact text of the COPYRIGHT NOTICE of any Open Game Content You are copying, modifying or distributing, and You must add the title, the copyright date, and the copyright holder's name to the COPYRIGHT NOTICE of any original Open Game Content you Distribute.

7. Use of Product Identity: You agree not to Use any Product Identity, including as an indication as to compatibility, except as expressly licensed in another, independent Agreement with the owner of each element of that Product Identity. You agree not to indicate compatibility or co-adaptability with any Trademark or Registered Trademark in conjunction with a work containing Open Game Content except as expressly licensed in another, independent Agreement with the owner of such Trademark or Registered Trademark. The use of any Product Identity in Open Game Content does not constitute a challenge to the ownership of that Product Identity. The owner of any Product Identity used in Open Game Content shall retain all rights title and interest in and to that Product Identity.

8. Identification: If you distribute Open Game Content You must clearly indicate which portions of the work that you are distributing are Open Game Content.

9. Updating the License: Wizards or its designated Agents may publish updated versions of this License. You may use any authorized version of this License to copy modify and distribute any Open Game Content originally distributed under any version of this License.

10. Copy of this License: You MUST include a copy of this License with every copy of the Open Game Content You Distribute.

11. Use of Contributor Credits: You may not market or advertise the Open Game Content using the name of any Contributor unless You have written permission from the Contributor to do so.

12. Inability to Comply: If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Open Game Content due to statute, judicial order, or governmental regulation then You may not Use any Open Game Material so affected.

13. Termination: This License will terminate automatically if You fail to comply with all terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses shall survive the termination of this License.

14. Reformation: If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable.

15. COPYRIGHT NOTICE

Open Game License v 1.0 Copyright 2000, Wizards of the Coast, Inc. System Reference Document Copyright 2000, Wizards of the Coast, Inc.; Authors Jonathar Tweet, Monte Cook, Skip Williams, based on original material by E. Gary Gygax and Dave Arneson. All material wholly derived from the System Reference Document is hereby designated as Open Game Content, in accordance with this license.