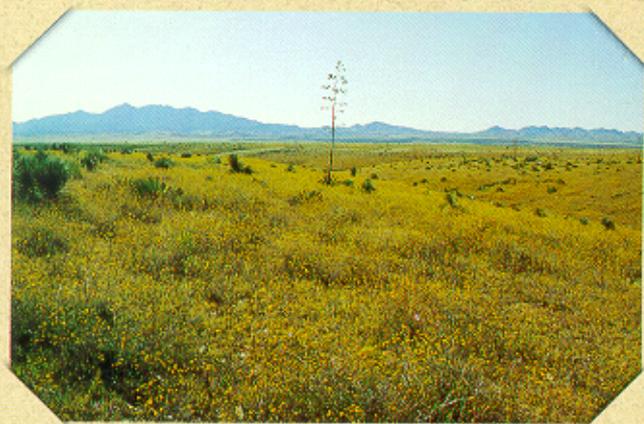


**POISONOUS PLANTS  
OF  
SOUTHEASTERN  
ARIZONA**



PRODUCED BY CORONADO RC&D AREA, INC., AND  
CONSERVATION DISTRICTS OF SOUTHEASTERN ARIZONA

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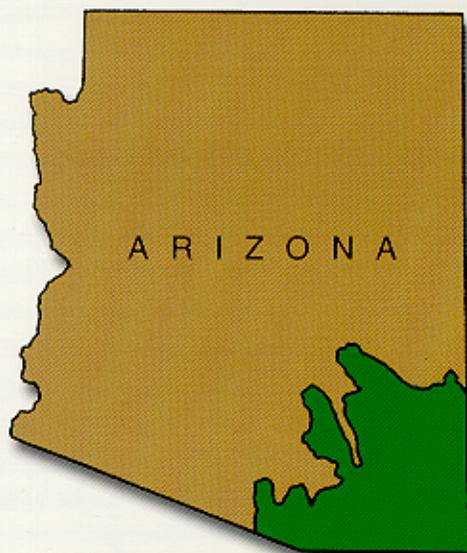
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THIS PUBLICATION IS A FIELD GUIDE ONLY; IT IS TO BE USED FOR QUICK IDENTIFICATION OF COMMON PLANTS WITH POISONOUS PRINCIPLES. IT IS NOT A COMPLETE REFERENCE. ADDITIONAL INFORMATION ON INDIVIDUAL PLANTS, POISONING AND TREATMENT MAY BE OBTAINED BY CONSULTING REFERENCES CITED OR OTHER EXPERTS.

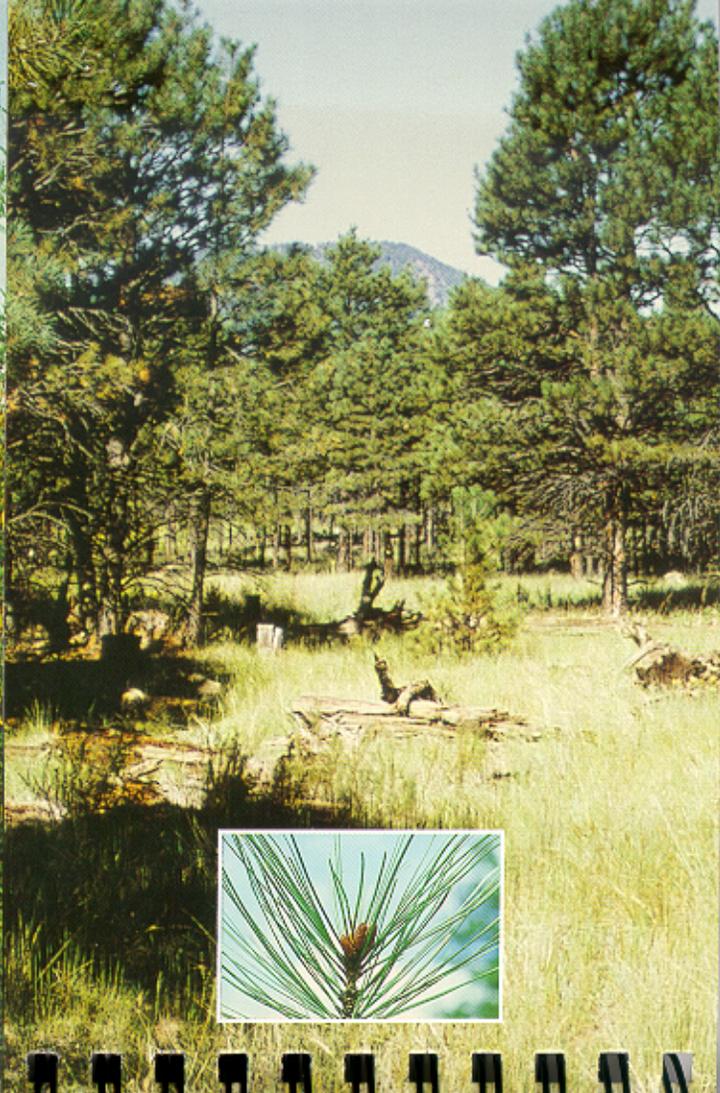


 = Area covered by this booklet

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#1

Mesquite, velvet, western honey, honey

**Scientific Name:** *Prosopis juliflora* var. *velutina*, *Prosopis juliflora* var. *torreyana*, *Prosopis juliflora* var. *glandulosa*

**Description:** Trees or shrubs. Leaves bipinnately compound with many small, lanceolate leaflets. Flowers are borne in elongated, yellowish catkins.

**Distribution and Habitat:** Throughout central and southern Arizona.

**Poisonous Principle and Symptoms:**

Overeating of the beans by horses can cause impaction of the gut. Horses will exhibit signs of colic, have elevated temperatures, sweat and bite at their sides. Passage of manure stops.

**Conditions of Poisoning:** Ruminant species can consume mesquite beans at any stage without problems. Overeating of dry beans by a horse at any time can cause problems.

**Treatment:** Treatments for impaction are usually futile; nearly always results in death of the animal.

**Management:** Move horses from mesquite when good bean crops begin to mature. Use cows or goats to clean up bean crops before turning out horses.

#2

Ponderosa pine, western yellow pine, blackjack pine

**Scientific Name:** *Pinus ponderosa*

**Description:** The bark of young trees is dark brown to black, but the bark becomes yellowish- to reddish-brown as trees mature. Needles are borne in clusters of 3 to 5 and are 4 to 10 inches long. Cones are 2 to 4 inches in length with prickles.

**Distribution and Habitat:** Common in the mountains of Arizona, mostly above 5000 feet elevation.

**Poisonous Principle and Symptoms:** A toxin has not been identified. Most poisoning occurs when cows are in a late stage of pregnancy. Abortion or premature birth of weak calves and retained placenta are characteristic.

**Conditions of Poisoning:** Poisoning mostly occurs when hungry, pregnant cows are forced to eat pine needles when they seek shelter in ponderosa pine stands.

**Treatment:** There are few advance signs of abortion, and manual removal of the retained placenta has often resulted in excessive hemorrhage.

**Management:** If pastures containing ponderosa pine are to be used by late term pregnant cows, ensure that adequate forage is present.



#3

**Johnson grass, president grama**

**Scientific Name:** *Sorghum halapense*

**Description:** A large, coarse, perennial grass reproducing both by seed and large, scaly rhizomes. Culms are 1-2 meters tall.

Leaf blades are long (1-2 feet), flat, broad (1/4 - 3/4 inch) and smooth, shiny green in color. Seedheads are large and purplish.

**Distribution and Habitat:** Throughout Arizona, especially in heavy-textured, bottomland soils.

**Poisonous Principle and Symptoms:** Johnson grass is a valuable forage grass growing on bottom sites throughout the state at elevations below 6000 feet, but rapid growth of new leaves and wilting caused by drought or freezing can cause toxic levels of hydrocyanic acid (HCN) to be produced. Symptoms are trembling, convulsions, bloating followed by death.

**Treatment:** Because the toxic effects of HCN poisoning are so rapid, treatment is usually not possible

**Management:** Johnson grass is extremely palatable and can be safely grazed in the summer growing season or when dormant. New growth, which is wilted by freezing or early summer drought, should not be grazed until the black is gone from the leaves.



#4

**Tall fescue, alta fescue, goar fescue**

**Scientific Name:** *Festuca arundinacea*

**Description:** Coarse, perennial grass, deeply rooted in clumps 3-4 feet tall at maturity. Leaves broad, dark green, ribbed and rough on upper surface. Leaf sheath smooth, spikelets many-flowered.

**Distribution and Habitat:** Widely distributed; does best in wet heavy soils of high organic content; strongly drought resistant.

**Poisonous Principle and Symptoms:** Plants infested with a fungus contain alkaloids which cause gangrene (fescue foot) in cattle.

Symptoms of lameness appear in a week and a half to two weeks or longer. Horses show a wide range of reproductive problems when grazing fungus infested fescue.

**Conditions of Poisoning:** All parts of the plant are poisonous and retain their toxicity when made into hay. Fescue pastures are most poisonous after grass is headed. Poisoning takes place when animals are in pastures where other forage is scarce.

**Treatment:** Remove animals from source of fescue.

**Management:** Rotate pastures to avoid animals ingesting high percent of fescue. Plant "fungus free" fescue.



#5

Western coral bean, coral tree, Indian bean

**Scientific Name:** *Erythrina flabeliformis*

**Description:** Perennial shrub; alternate, broadly ovate leaflets; barren spiny stems; flowers red in terminal clusters (spring); pods are brown with bright red seeds.

**Distribution and Habitat:** Throughout the desert mountains of southeastern Arizona at elevations of 3000 to 5000 feet. Rocky canyon slopes and washes. Pima, Cochise, and Santa Cruz counties.

**Poisonous Principle and Symptoms:** The toxin is an alkaloid found in the beans. The stems are reported to be poisonous as well. Toxic to cattle and humans and affects the motor nerves.

**Conditions of Poisoning:** It rarely affects cattle. The beans are bright red and are attractive to humans, especially small children. These beans have been used as beads for jewelry which can potentially be swallowed.

**Treatment:** If beans are ingested, seek medical help ASAP.

**Management:** Be able to identify western coral bean and avoid gathering the beans. Although it can be tempting to use as an ornamental, this should be avoided if children can access the plant.



#6

Lantana

**Scientific Name:** *Lantana spp.*

**Description:** Shrubs with square twigs and a few scattered spines; leaves are simple, opposite or whorled and oval-shaped with toothed margins. Flowers are white, yellow, orange, red or blue, small and tubular, occurring in flat-topped clusters. Fruit is berrylike, blue-black with a hard seed.

**Distribution and Habitat:** Along stream bottoms in the southwest, cultivated as an ornamental.

**Poisonous Principle and Symptoms:** Alkaloids are the poisonous principle with green unripened fruit most dangerous, especially to children. Ingestion can cause intestinal irritation, bloody diarrhea, vomiting, muscular weakness, jaundice and circulatory collapse. Death is possible but not common. Foliage can cause photosensitization in livestock and pets and dermatitis in humans.

**Conditions of Poisoning:** Cattle grazing riparian pastures where other forage is scarce. Most dangerous in periods of lush growth following rains.

**Management:** Fencing, manual and chemical control of plants.



#7  
Mistletoe

**Scientific Name:** *Phorondendron spp.*

**Description:** Plants with or without chlorophyll, parasitic on various trees and shrubs; leaves with well-developed blades or reduced to scales.

**Distribution and Habitat:** Occurs in most Arizona counties 7000 feet and lower. Four species listed in *Arizona Flora* (Kearney and Peebles, 1960) are parasitic on leguminous shrubs and trees or juniper or pine trees.

**Poisonous Principle and Symptoms:** Humans may be killed by ingesting these parasitic forbs. Some species are palatable to cattle, but poisoning is rare.

**Conditions of Poisoning:** Ingestion of plants or berries by humans may cause poisoning.

**Treatment:** If berries are ingested by humans, seek medical assistance.

**Management:** Generally not a problem for livestock poisoning.



#8  
Poison ivy, poison oak

**Scientific Name:** *Rhus radicans*  
(*Toxicodendron radicans*)

**Description:** In Arizona, poison ivy is a low shrub seldom growing more than three feet high. The leaves are dark green and consist of three leaflets with serrated edges. The flowers are greenish-white and the small berries are creamy white.

**Distribution and Habitat:** Poison ivy is found in all of the wetter mountains of Arizona from about 5000 to 7000 feet. It prefers a moist and shady habitat.

**Poisonous Principle and Symptoms:** Poison is a milky oil, urushoil. Livestock are seldom bothered, but susceptible persons coming into contact with the oil, residue or smoke, develop a severe rash within a few hours.

**Conditions of Poisoning:** Contact by susceptible persons.

**Treatment:** Susceptible persons coming into contact with the herb should wash the area with a strong soap. If a persistent rash develops, see a doctor.

**Management:** Eradicate from areas having heavy human traffic.



#9

Bird of paradise—Mexican, yellow, and red

**Scientific Name:** *Caesalpinia gilliesii* (yellow); *Caesalpinia pulcherrima* (red)

**Description:** Naturalized shrubs from Mexico. Deciduous plants with bipinnate compound leaves, pale green bark, disagreeable odor; grow from 4 to 10 feet tall. They bear numerous clusters of yellow or red flowers with long red stamens.

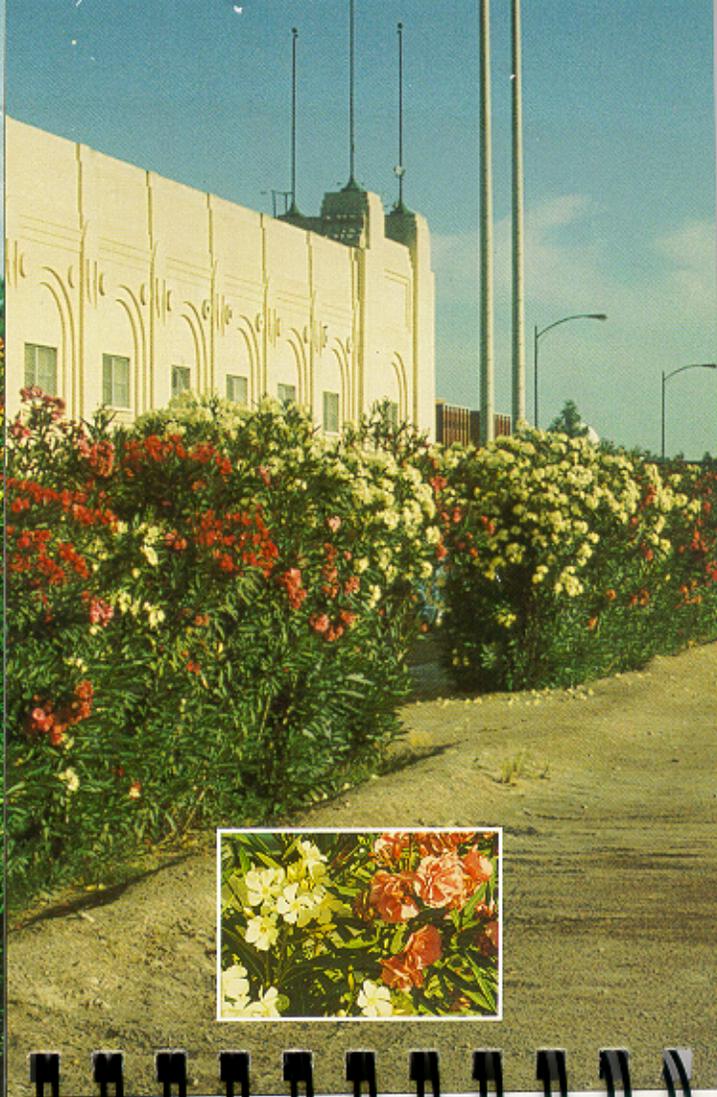
**Distribution and Habitat:** Mexican bird of paradise is found above 4000 feet around abandoned mining camps and homesteads. Red bird of paradise is a less hardy species and is popular as an ornamental in the lower valleys.

**Poisonous Principle and Symptoms:** Pods and seeds of these plants may cause severe enteritis in man and beast. Symptoms include nausea and extreme discomfort.

**Conditions of Poisoning:** Children and goats are most likely to be affected.

**Treatment:** See your doctor.

**Management:** Care should be used when selecting these plants as ornamentals. Where large patches of yellow bird of paradise cause problems, they should be eradicated.



#10

Oleander

**Scientific Name:** *Nerium oleander*

**Description:** Erect glabrous shrub, leaves in whorls of 3, rarely 4 or 2, narrow and leathery. The flowers are showy, rose-red, white or yellowish. The plant can attain a height of 7 to 15 feet, and blooms in the spring through late summer in Arizona.

**Distribution and Habitat:** Grown primarily as a landscape, screen, windbreak or border plant throughout Arizona. Not particular about soil type, it withstands considerable drought, poor drainage, soil with relatively high salt content. Thrives in heat and strong light, even reflected light from paving.

**Poisonous Principle and Symptoms:** All parts, even the smoke of this ornamental shrub, are highly toxic to livestock and humans.

**Conditions of Poisoning:** Livestock are most likely to be poisoned if fed landscape clippings that contain oleander.

**Treatment:** Seek medical assistance if human inhales smoke or ingests sticky sap found in stems, leaves and flowers.

**Management:** Do not burn oleander plant parts or feed landscape clippings to livestock if they contain oleander.



#11

**Broom snakeweed, threadleaf snakeweed, matchweed, broomweed, resinweed, turpentineweed**

**Scientific Name:** *Gutierrezia sarothrae*, *G. microcephala*.

**Description:** Low growing, half-shrubs, 1 to 2 feet tall. Leaves are linear, alternate and resinous. Flowers are yellow and occur in small sunflower type heads.

**Distribution and Habitat:** A native plant which occurs throughout Arizona at elevations from 2,800 to 8,000 feet.

**Poisonous Principle and Symptoms:** The principle toxin is saponin, a steroid glycoside. It is also known to be a secondary or facultative absorber of selenium. Primary effect of poisoning is abortion in cattle; sheep and goats are less prone to abort.

**Conditions of Poisoning:** All classes of livestock are susceptible to poisoning. Plants are most toxic during early growth stages when leaves are tender.

**Treatment:** Treatment is limited to moving livestock to areas with ample amount of good feed and water.

**Management:** Monitor existing populations of snakeweed and limit the use of those areas during the spring.



#12

**Burroweed, jimmyweed, rayless-goldenrod**

**Scientific Name:** *Isocoma tenuisecta* (*Haplopappus tenuisectus*); *I. pluriflora* (*H. heterophyllus*)

**Description:** Half-shrubs 1-4 feet tall, leaves alternate along the stems, often sticky. Burroweed leaves are narrow and pinnately divided into linear lobes. Jimmyweed leaves are linear-oblongate with entire margins. Seeds have numerous white capillary bristles.

**Distribution and Habitat:** Burroweed is mainly found on desert grasslands in southern Arizona and extreme southwestern New Mexico.

Jimmyweed grows on alluvial bottoms, plains and slopes throughout Arizona and New Mexico.

**Poisonous Principle and Symptoms:** The toxin is a higher alcohol, tremetol, which is accumulative, thus symptoms are slow to develop. First noticeable is a reluctance of the animal to move, then nervousness followed by trembling.

**Conditions of Poisoning:** All livestock are susceptible. Most often occurs in the spring and summer.

**Treatment:** Usually fatal, but may recover when placed on high energy feed and given ample water.

**Management:** Poisoning mostly occurs when new animals are grazed where these plants grow.



#13  
Beargrass

**Scientific Name:** *Nolina microcarpa*;  
*N. texana*

**Description:** Large evergreen plants with leaves arising from thick, woody, basal stems that form clumps that are 2-5 feet tall, up to 8 feet in diameter and resemble coarse bunch grasses.

**Distribution and Habitat:** Found throughout Arizona and New Mexico. Both species normally grow on gravelly or sandy soils in desert grasslands and woodlands at elevations from 3000 to 6000 feet.

**Poisonous Principle and Symptoms:**

The poisonous principle is unknown, found mainly in the flowering stalks, and is not accumulative; results in loss of appetite and photosensitization.

**Conditions of Poisoning:** All classes of livestock are affected but sheep and goats are most susceptible. Livestock relish the young flowering stalks, so poisoning mainly occurs during the spring flowering period.

**Treatment:** Remove poisoned livestock from areas of poisoning and provide ample high energy feed and ample water.

**Management:** In Arizona there are few reported cases of poisoning in native cattle.



#14  
Whitestem paperflower, greenstem  
paperflower, woolly paperflower,  
paperdaisy, yellow paperdaisy

**Scientific Name:** *Psilostrophe sparsiflora*,  
*P. tagetina*, *P. Cooperi*

**Description:** Perennial herbs or shrubs, rounded, 12 to 18 inches tall, hairy to woolly stems and leaves. Leaves alternate and narrow. Flowers yellow, persistent, and become pale and papery with maturity.

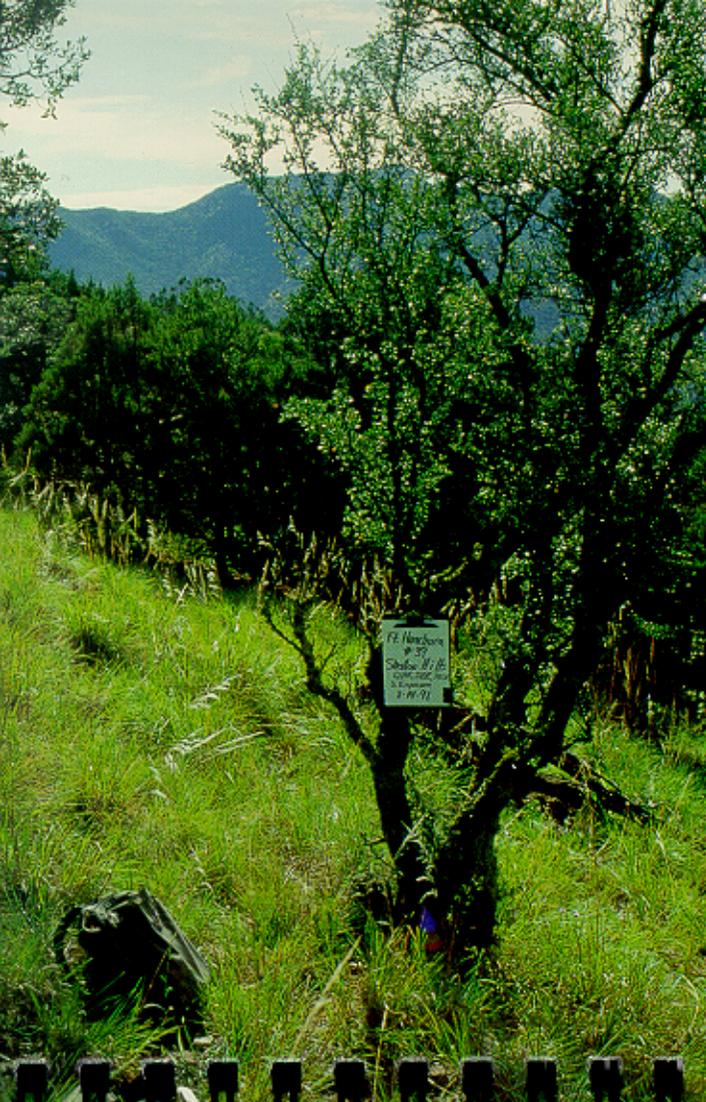
**Distribution and Habitat:** Native plants that occur throughout most of the northern and eastern part of Arizona at elevations below 7,500 feet.

**Poisonous Principle and Symptoms:** Toxin is not known. Symptoms include uncoordination, stumbling, loss of appetite, coughing and vomiting greenish liquid.

**Conditions of Poisoning:** New growth, or young plants, are most toxic, especially to sheep. Reported losses occur in the fall, winter, and spring. Cattle losses have not been proven.

**Treatment:** Treatment is limited to moving livestock to non-infested pastures that have ample amount of quality feed.

**Management:** Provide for a diversity of palatable plants from which livestock may choose.



#15

**Birchleaf mountain mahogany,  
hairy mountain mahogany**

**Scientific Name:** *Cercocarpus betuloides*,  
*C. montanus* var. *paucidentatus*, *breviflorus*

**Description:** Small tree or shrub, leaves evergreen, leathery, small (1/2 to 1 inch long), obovate and usually toothed at the margin. Fruit is an achene with a long (1-2 inches), plumose tail. Flowers are solitary in leaf axils and inconspicuous.

**Distribution and Habitat:** Steep hillslopes with shallow soils in the interior chaparral zone and southeastern mountain ranges in Arizona above 4500 feet elevation.

**Poisonous Principle and Symptoms:**

Normally mountain mahogonies are valuable browse plants for cattle, sheep and goats, but freezing can cause the formation of hydrocyanic acid (HCN) within the leaves of the plant. Symptoms are trembling convulsions, bloating followed by death.

**Treatment:** Because poisoning by mountain mahogany almost always occurs in remote areas and the toxic effects are so quick, treatment is usually not possible.

**Management:** Use when frost is not expected or defer mountain pastures from grazing until after several hard freezes in the fall.



#16

**Threadleaf groundsel, woolly groundsel**

**Scientific Name:** *Senecio longilobus*

**Description:** Threadleaf groundsel is a shrub 12 to 48 inches high. Leaves are usually divided into five parts, and resemble a pitchfork. Stems and leaves are covered with fine gray hairs. Bright yellow composite flowers bloom from August until frost.

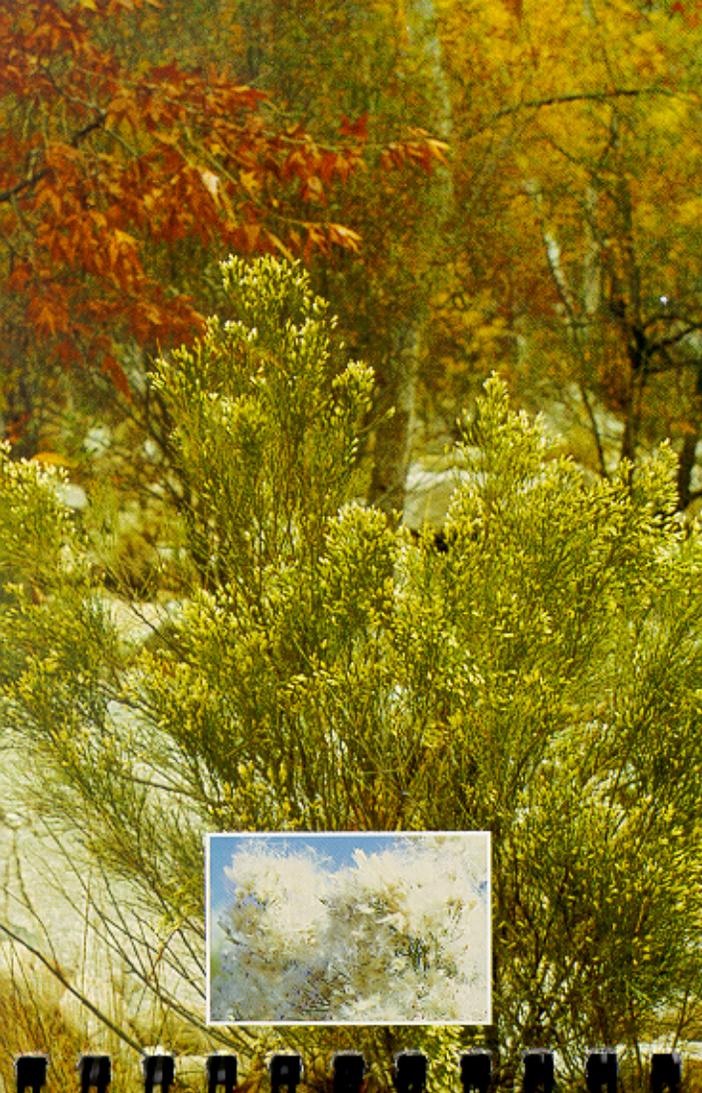
**Distribution and Habitat:** The plant is found in most Arizona counties from 2500 to 7500 feet along dry streambanks and sandy mesas.

**Poisonous Principle and Symptoms:** The toxins are the pyrrolizidine alkaloids. These cause liver damage and are cumulative. Animals may walk aimlessly and may bump into objects or may charge moving objects. A yellowing of the mucous membranes, constipation, a dry scaly muzzle and general unthriftiness are other symptoms.

**Conditions of Poisoning:** Threadleaf groundsel is not palatable and problems usually occur in the spring when feed is scarce.

**Treatment:** There is no medical treatment.

**Management:** Patches of the plant may be controlled by chemical means or by grubbing.



#17

**Desert broom, broom baccharis, rosin-weed**

**Scientific Name:** *Baccharis sarothroides*

**Description:** Erect shrubs 3-10 feet tall. Stems definitely woody, older branches rigid with dark-colored bark, young branches green and strongly angled. Leaves linear 1/2-1 inch long and not toothed. In autumn, abundant white cottony seeds make pistillate plant easily identified.

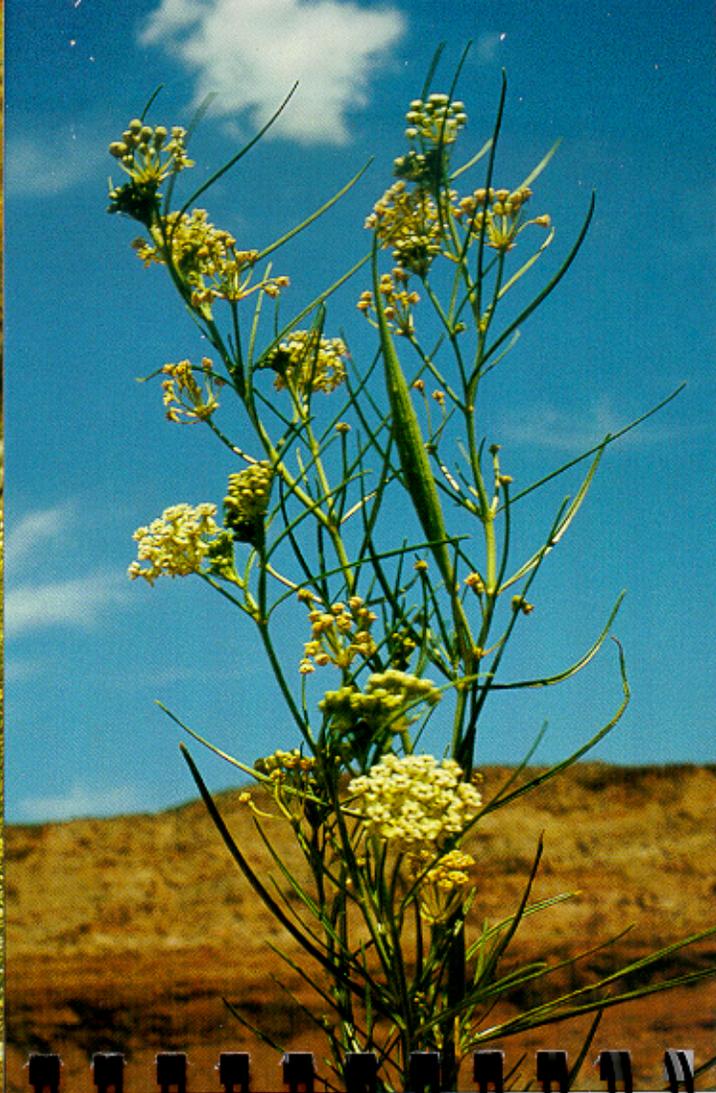
**Distribution and Habitat:** Mainly found in southern Arizona in gravelly or sandy washes, shallow drainages, flats and on low hills in desert grasslands with elevations below 5000 feet.

**Poisonous Principle and Symptoms:** Unknown although *Baccharis sarothroides* and *B. pteronioides* are reputed to be poisonous to livestock. Poisoned animals are stiff-gaited as though sore-footed. If exerted, animals have pronounced trembling and convulsions. Death may occur if large amounts are consumed.

**Condition of Poisoning:** Cases are rare because *Baccharis* is distasteful and plants are fairly scattered.

**Treatment:** Place poisoned animals on good quality feed and provide ample fresh water.

**Management:** Poisoning rarely occurs. Controlling *Baccharis* on rangelands may not be cost effective. Herbicides are effective in controlling thick stands.



#18

**Horsetail milkweed, poison milkweed**

**Scientific Name:** *Asclepias subverticulata*  
(*A. galioides*)

**Description:** Erect, perennial herb arising from a horizontal, creeping rootstock. The simple leaves are long and narrow and usually occur in whorls around the stem. The flowers are greenish-white in color and are dense, many flowered, umbrella-like heads at the tips of the stems or in the leaf axils.

**Distribution and Habitat:** Occurs in most Arizona counties between 2500 and 8000 feet in elevation. It is found on dry plains and mesas, along roadsides, and in permanent pastures and hay fields.

**Poisonous Principle and Symptoms:** Contains toxic glycosides and resins. The first evidence of milkweed poisoning is loss of muscular control.

**Conditions of Poisoning:** Poisonous at all stages of growth, even after maturity, and in hay. It causes poisoning in all classes of livestock.

**Treatment:** There is no specific antidote or medicinal treatment for poisoned animals.

**Management:** When there is a scarcity of feed, areas of known milkweed infestation should not be grazed by livestock, particularly in late spring and early summer.



#19

Specklepod loco, spotted loco, locoweed,  
rattleweed, blue loco, crazyweed

**Scientific Name:** *Astragalus lentiginosus*

**Description:** Annual or short-lived perennial; leaves pinnately compound with many rounded leaflets, without hairs or hairs short and sparse; flowers purple and white, shaped like a sweetpea; pods inflated and often mottled.

**Distribution and Habitat:** Most of Arizona, especially on sandy soils, except at elevations over 7000 feet.

**Poisonous Principle and Symptoms:** Toxin swainsonine accumulates in tissue affecting the brain, nerves and other systems, resulting in "loco" symptoms, abortions and birth defects.

**Conditions of Poisoning:** Affects cattle, sheep, horses. All plant parts are poisonous, even when dry. Most poisoning occurs in the spring.

**Treatment:** Symptoms may occur after several weeks of grazing loco. Animals removed from access to locoweed, when early symptoms are observed, may recover if placed on good feed.

**Management:** Be able to identify specklepod loco and observe if livestock are eating this species. If so, initiate management to prevent continued use.



#20

Barestem larkspur, desert larkspur,  
naked delphinium

**Scientific Name:** *Delphinium scaposum*

**Description:** Perennial forb with basal, palmately lobed leaves. Dark or royal blue flowers are borne on short flower stalks of a raceme inflorescence. The flowers each have a prominent spur.

**Distribution and Habitat:** Northern, central and southeastern Arizona on deserts and dry mesas, mostly below 5000 feet elevation.

**Poisonous Principle and Symptoms:** The toxins are delphinine and other related alkaloids. Symptoms include weakness, uneasiness, falling, vomiting, bloating, and finally death.

**Conditions of Poisoning:** Cattle are most susceptible, horses less, and sheep much less susceptible. Poisoning occurs in the spring of the year when larkspur is green, especially if other palatable forage is dry or scarce.

**Treatment:** The symptoms of larkspur poisoning progress relatively fast to death and there is little chance to save an animal on the range.

**Management:** If there has been a history of poisoning by larkspur, defer grazing until after larkspur plants have flowered.



#21

Russian thistle, tumbleweed, witchweed

**Scientific Name:** *Salsola kali* var. *tenuifolia*

**Description:** Russian thistle is an intricately branched annual herb, 1/2 to 4 feet tall, with stems becoming hard and prickly when dry. The narrow, awl-shaped, strongly spine-tipped leaves are persistent along the stem after the plants have dried.

**Distribution and Habitat:** Throughout Arizona, grows on disturbed areas, abandoned farmland and depleted rangelands.

**Poisonous Principle and Symptoms:** During periods of rapid growth, Russian thistle accumulates toxic levels of nitrate and may contain lethal levels of soluble oxalates. Weakness, lameness, staggering, coma and death.

**Conditions of Poisoning:** Oxalic poisoning affects all classes of livestock. Ruminant animals are most affected by nitrate poisoning with cattle being the most frequently poisoned. Russian thistle is most toxic during periods of rapid growth when the plants are young.

**Treatment:** Some benefit to using high calcium supplemental feed.

**Management:** Remove any suspected poisoned animal and place it on high nutrition feeds.



#22

Cocklebur

**Scientific Name:** *Xanthium saccharatum* and *Xanthium spinosum*

**Description:** Annual forbs; alternate, spiny, triangular leaves; separate male and female flowers with the male in clusters at the ends of the stems and the female in the leaf axils; fruit is bur-like with hooked barbs and two seeds.

**Distribution and Habitat:** Common throughout Arizona in disturbed areas and roadsides. Often occurs in flooded bottoms and near water holes.

**Poisonous Principle and Symptoms:** Toxin is hydroquinone. There is also a glycoside toxin in the seeds which are rarely eaten. Symptoms start with general weakness, labored breathing, nausea, and vomiting. Prostrated animals begin convulsions in legs and neck muscles.

**Conditions of Poisoning:** Most toxic as seedling during cotyledon stage. As true leaves develop, the poison dissipates. Poisonous to cattle, sheep, horses and swine.

**Treatment:** Fatty substances such as cream, whole milk, lard and linseed oil may prevent poisoning. Linseed oil should be given through a stomach tube.

**Management:** Monitor livestock closely near water holes and wet spots when cocklebur seedlings appear.



#23

Poison hemlock, spotted hemlock,  
poison parsley

**Scientific Name:** *Conium maculatum*

**Description:** Leafy herb, 4 to 8 feet tall, white fleshy unbranched taproot, stout smooth stems spotted with purple, especially in the lower portions. Large smooth triangular leaves, pinnately divided 3 to 4 times into wedge-shaped leaflets. Small white flowers in umbrella-shaped clusters.

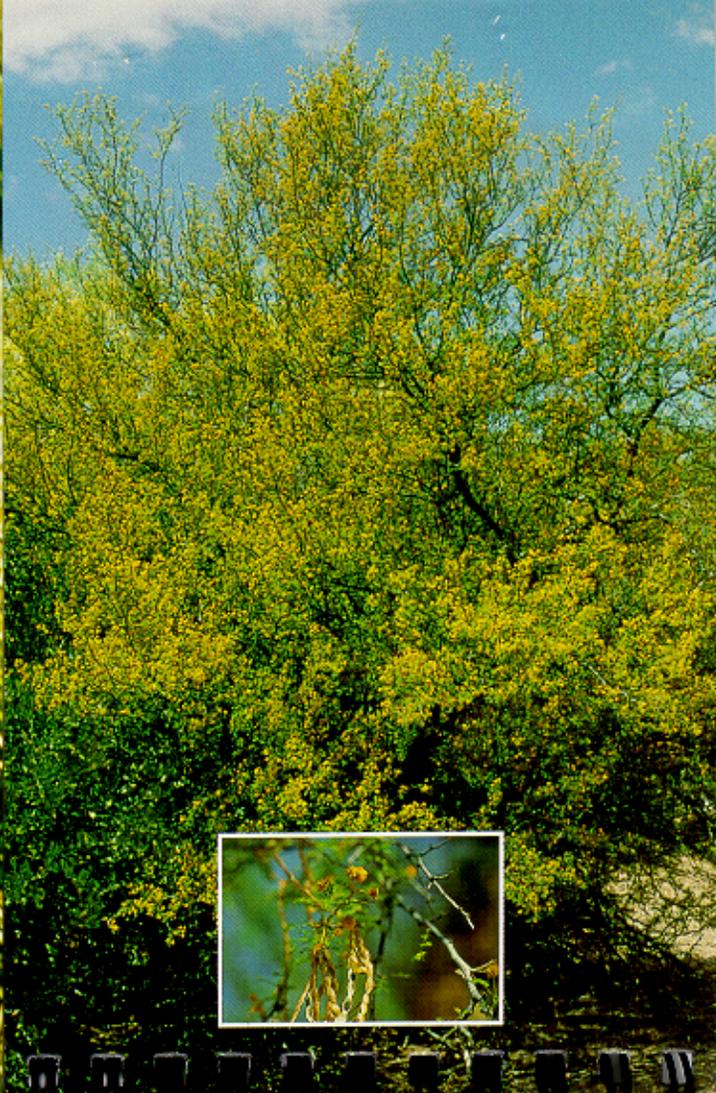
**Distribution and Habitat:** Throughout Arizona, mainly in Graham, Greenlee and Yavapai counties.

**Poisonous Principle and Symptoms:** All parts of the plants contain alkaloids which are poisonous to all livestock and humans. Symptoms are nervousness, trembling, loss of coordination, eventual death through respiratory paralysis.

**Conditions of Poisoning:** Spring when herbage is fresh. Poisoning only occurs when other forage is in short supply.

**Treatment:** Stimulants may aid in recovery. The plant is not always lethal and animals removed may recover within a few days.

**Management:** Localized infestations may be grubbed before seed maturity, fenced or controlled with herbicides.



#24

Whitethorn, whitethorn acacia,  
mesquit acacia

**Scientific Name:** *Acacia constricta*

**Description:** Spreading shrub from 3 to 15 feet tall. Young stems normally have two 1 to 1-1/2 inch long white spines at each bud. Leaves bipinnately divided into 1-7 pairs of branchlets. Flowers are a round yellow "button". The 2-1/2 to 5 inch long seed pods are constricted between the seeds.

**Distribution and Habitat:** Common along washes, slopes and on mesas in southern Arizona and New Mexico between 2000 and 5000 feet.

**Poisonous Principle and Symptoms:** High in compounds that form hydrocyanic acid (HCN) when damaged by drought or frost. Symptoms are trembling, convulsions, bloating followed by death.

**Conditions of Poisoning:** Rare because of low palatability; normally not used in any large quantity by livestock.

**Treatment:** Not usually possible due to rapid onset of HCN poisoning.

**Management:** Defer grazing from heavily infested areas during critical frost periods. Effectively controlled with herbicides.



#25

**Jimsonweed, sacred datura, Indianapple, thornapple**

**Scientific Names:** *Datura stramonium*, *Datura meteloides*

**Description:** Weedy herbs with stout, erect, odorous stems; large ovate leaves with wavy lobed margins; flowers are large on stem forks, tubular, white to purple and very fragrant; fruit is a prickly capsule.

**Distribution and Habitat:** Occurs from 1,000 to 6,000 feet along roadsides, ditches and other disturbed areas.

**Poisonous Principle and Symptoms:** The toxin is an alkaloid, atropine. Poisoning starts with an intense thirst, distorted vision, lack of coordination, high temperature and a quick but weak pulse. Convulsion, coma and death follow. Dermatitis may occur when touched by humans.

**Conditions of Poisoning:** Plants are poisonous to livestock and humans. Livestock rarely consume these plants due to their foul smell. Poisoning to humans has been reported from eating seeds and unripened seed pods.

**Treatment:** None for livestock. Humans should seek emergency medical attention at once.

**Management:** Jimsonweed can be grubbed before seed set. Can be controlled with herbicides.



#26

**Pinnate tansy mustard, tansy mustard**

**Scientific Name:** *Descurainia pinnata*

**Description:** Annual forb, covered with fine gray hairs. Leaves are alternate and pinnately divided. Flowers are small, yellow or whitish. Fruits are long, round, slender, 2-celled capsules.

**Distribution and Habitat:** Native weed abundant in moist spots throughout the state between 100 and 7000 feet in elevation.

**Poisonous Principle and Symptoms:** The principle is unknown. Poisoned cattle become partially or completely blind and wander aimlessly or stand pushing against some solid object. Animals lose their ability to use their tongue in swallowing and cannot eat or drink.

**Conditions of Poisoning:** Large quantities must be eaten for a long time before symptoms appear. Consumption of toxic amounts is most likely to occur during the spring.

**Treatment:** Treatment consists of administering 2 to 3 gallons of water twice daily by stomach tube. Nourishment, such as cottonseed meal, may be added to the water if the animal is weak.

**Management:** Defer heavily infested pastures during the spring-growth period, or provide more desirable forage to reduce mustard consumption.



#27

Filaree, redstem filaree, storksbill, heronsbill

**Scientific Name:** *Erodium cicutarium*

**Description:** Filaree is a dark-green annual prostrate forb that normally is less than 6 inches tall, but occasionally may grow up to 2 feet tall. Leaves are alternate and pinnately divided. The rose-lavender flowers are in clusters on stalks that arise from the leaf axils. The unusual long seed pods split into 5 parts at maturity.

**Distribution and Habitat:** Grows on open plains and mesas throughout Arizona and southern New Mexico. It also grows at higher elevations during the summer growing season.

**Poisonous Principle and Symptoms:** During years when rapid growth occurs, filaree may accumulate toxic levels of nitrates. Weakness, staggering, coma, death.

**Conditions of Poisoning:** Stocker cattle are very susceptible to poisoning when placed on grazing lands that are lush with filaree.

**Treatment:** Methylene blue intravenous injections.

**Management:** Filaree is a valuable forage plant in both its green and dry state. Remove any suspected poisoned animal and place it on high nutrition feeds.



#28

Desert tobacco and Tree tobacco

**Scientific Name:** *Nicotiana trigonophylla* and *Nicotiana glauca*

**Description:** Tobaccos have long tubular, white, greenish or yellow flowers blooming year-round; leaves are simple, alternate, ovate and blue-green; leaves and stems often hairy and sticky. Tree tobacco is a shrub or small tree from Argentina, up to 18 feet tall. Desert tobacco is a perennial forb with diurnal flowers.

**Distribution and Habitat:** Throughout Arizona along sandy washes, stream banks, and waste areas at elevations up to 7,000 feet.

**Poisonous Principle and Symptoms:** Toxin is nicotine and anabasine, an alkaloid. Symptoms include vomiting, salivating, bloating, staggering, spasms, irregular heartbeat, and prostration. Death can be immediate.

**Conditions of Poisoning:** Livestock and humans are affected. Tobaccos have strong odors and are unpalatable.

**Treatment:** None; symptoms can occur immediately and result in quick death. Expect losses in Arizona.

**Management:** The tobaccos usually occur in waste areas, so range improvements to reduce these areas can prevent losses.



#29

Silverleaf nightshade, white horsenettle,  
bullnettle, groundcherry, wild potato

**Scientific Name:** *Solanum elaeagnifolium*

**Description:** An erect prickly perennial, 1 to 3 feet in height. Leaves are simple, oblong, spiny with wavy margins. Flowers a deep violet to blue. Fruit is berry-like, dull yellow to orange-yellow.

**Distribution:** Occurs throughout the state at elevations from 100 to 7,000 feet.

**Poisonous Principle and Symptoms:** The principle toxin is solanine, a glycoalkaloid. Symptoms of poisoning include; drowsiness, apathy, labored breathing, trembling, progressive weakness, nausea, vomiting, diarrhea, potential unconsciousness and paralysis.

**Conditions of Poisoning:** The leaves and seedpods are poisonous. Both green and ripe seedpods are considered the most poisonous part of this plant.

**Treatment:** There is no specific medicinal treatment.

**Management:** Limited control can be achieved by mechanical and chemical treatment. However, the plants readily resprout from rhizomes. Maintain a good diversity of palatable plants.



#30

Annual goldeneye, hills of gold

**Scientific Name:** *Viguiera annua*

**Description:** An upright, bushy annual forb 1-3 ft. high. The narrow leaves are opposite, 1-3 inches long and 1/8 inch broad. The numerous composite heads have 12 bright yellow ray flowers around a small yellow-green disk.

**Distribution and Habitat:** Throughout central and southeastern Arizona. At elevations from 4000 to 6000 feet; prefers clayey soils on cool exposures (north facing) on hill slopes.

**Poisonous Principle and Symptoms:** Both nitrates and hydrocyanic acid (HCN) are suspected. Cattle are affected. Symptoms at first include deep, rapid breathing to violent gasping. Animals tremble, stagger and fall in convulsions.

**Treatment:** Use care to distinguish type of poisoning. HCN responds to sodium nitrite and sodium thiosulfate. Nitrates: methylene blue.

**Management:** Cattle can safely graze annual goldeneye in the spring. Annual goldeneye is toxic at the pre-bloom to bloom stage.



#31

Prickly poppy, thorn apple, thistle poppy,  
Cowboy's fried egg

**Scientific Name:** *Argemone pleiacantha*

**Description:** Perennial, herbaceous plants with clasping, deeply lobed leaves; leaves, stems and fruits prickly. Flowers are large with 4 to 6 white petals and many yellow stamens.

**Distribution and Habitat:** Central, eastern and southeastern Arizona on roadsides, washes, slopes and plains, often on disturbed soils.

**Poisonous Principle and Symptoms:** All parts of the plant contain alkaloids that may be toxic to humans and livestock. Human symptoms include vomiting, diarrhea, visual impairment and coma.

**Conditions of Poisoning:** Livestock normally are not at risk because of the very poor palatability of prickly poppy. Human poisoning may occur when grains used for food are contaminated with prickly poppy seed.

**Treatment:** None indicated.

**Management:** Generally not a problem with livestock because of poor palatability. Care should be taken by humans to avoid contamination of food grains with seeds of prickly poppy.



#32

Noseburn, stinging nettle

**Scientific Name:** *Tragia stylaris*, *t. nepetaefolia*

**Description:** Slender perennial forbs often with twining stems. Leaves alternate along stems, simple or compound with serrate margins. Stems, leaves and fruits with harsh stinging hairs. Flowers are monoecious with staminate flowers above two or more pistillate flowers.

**Distribution and Habitat:** Found throughout Arizona and New Mexico. Both species are found in desert grasslands through woodlands at elevations from 2500 to 7000 feet. Most abundant in chaparral vegetation zones.

**Poisonous Principle and Symptoms:** None of the noseburn plant is poisonous, but all stiff brittle hairs have a caustic irritant which, on contact, produces painful irritation and reddening of the skin that normally stops after a short period of time. Severe dermatitis can occur.

**Conditions of Poisoning:** Humans are most affected when bare skin comes in contact with foliage. Secondary infections may occur if the irritated area is scratched and aseptic measures are not taken. Some pets show skin irritation when they come in contact with the plant.

**Treatment:** For itching, warm alkaline baths are useful. Calamine lotion is helpful in more severe cases.

**Management:** Avoid contact with plant or foliage.



#33

Mushroom, death cap, deadly amanita,  
parasol mushroom, toadstool

**Scientific Name:** *Amanita spp.*, *Lepiota spp.*

**Description:** Fungus with bulbous base, stem and a cap that bare gills on the under surfaces. Stems 3-8 inches tall and mostly of uniform diameter; caps 2-5 inches across in *Amanita* and 5-10 inches across in *Lepiota*. Reproduction is by spores produced on the gills.

**Distribution and Habitat:** Throughout Arizona and New Mexico. Common in wooded areas and pasture lands. Rarely found in lawns.

**Poisonous Principle and Symptoms:**

Amanitahemolysin, amanitotoxin and the alkaloid, muscaridine, are the major poisons. Symptoms of poisoning usually occur from 6 to 15 hours after ingestion. They include sudden severe abdominal pain, vomiting and diarrhea, bloody vomitus and stools, nervousness and loss of strength.

**Treatment:** In most cases, the long period between ingestion and onset of symptoms make adequate treatment difficult. When suspected poisoning occurs, an antiphalloidian serum and atropine can be administered. In severe cases, death occurs within 48 hours.

**Management:** Don't eat native mushrooms unless positively identified; then only eat small amounts at one time.



#34

Carelessweed, pigweed, red-root pigweed,  
Palmer amaranth

**Scientific Name:** *Amaranthus palmeri*

**Description:** Erect, tall summer annual, 1 to 6 plus feet tall. Has one main stalk with short branches. As the plant matures the stalk turns red. Leaves are alternate, diamond shaped with prominent whitish veins on the lower surface. Plant reproduces by seed.

**Distribution and Habitat:** A common weed found in moist disturbed soils throughout Arizona to elevations of 5,500 feet. It is commonly found on disturbed areas after spring or summer rains.

**Poisonous Principle and Symptoms:** Plants can contain up to 9 percent nitrate. Carelessweed can also cause bloat. Symptoms are weakness, staggering, coma, death.

**Conditions of Poisoning:** All classes of livestock are susceptible to poisoning. Toxic especially during stages of rapid growth and sudden temperature changes.

**Treatment:** Methylene blue intravenous injections.

**Management:** Monitor known areas of carelessweed and avoid grazing those areas during early growth and/or after sudden temperature changes.



#35  
Lupine

**Scientific Name:** *Lupinus spp.*

**Description:** Annuals or perennial plants reproducing by seeds. Flowers are white to purple borne on long racemes, blooming from February to October depending on elevation and habitat. Seeds are borne in flat, hairy seed pods containing three to six seeds. Leaves are hairy and palmate with six or eight leaflets radiating from a central axis.

**Distribution and Habitat:** Throughout Arizona from 1000 to 10,000 feet.

**Poisonous Principle and Symptoms:** Contain numerous alkaloids and, while sheep are most susceptible, all classes of livestock have been poisoned. Symptoms include nervousness, bunch quitting, difficult breathing, loss of muscle control, frothing at the mouth and death.

**Conditions of Poisoning:** Ingestion of seeds and seed pods by sheep is most dangerous.

**Treatment:** There is no effective medical treatment.

**Management:** Many species of lupines exist; not all are poisonous. Ranges containing lupines should be managed to minimize the effect of this plant.

OTHER NAMES

	O'odham	Spanish
Beargrass	moho, judum, mad	palmilla, sacahuista, nolina, zacate
Bird of paradise		piojo, palo colorado tabachin
Burroweed	wuhlu sha'i	yerba del burro, rocca
Cocklebur	waiwel	cadillo
Coral bean	bahwui	chilicote, pito, chilicote
Datura		toloache
Desert broom	shusk wakch, ahn	romerillo
Desert tobacco	wiw	Juan loco, tabaquillo
Filaree	hoho'ibad	corneton alfilerilla, alfilaria alfilaree
Goldeneye		ojos del oro lomas de oro senecio
Groundsel		floripondio, toloache
Jimsonweed	kotdobi	zacate Johnson
Johnson grass		lantana
Lantana		
Larkspur	chuchul-iiispul espuelita	
Locoweed	koponthakud	yerbas loca, garabatllo
Lupine	tash-mahhag	lupino
Mesquite	kui	mezquite
Mesquite beans	wihog	bechete, pechita
Milkweed	wihbam	chicharo del monte yerba de leche

Mistletoe	hahkwod	toji, muerbago
Mushroom	okstakud	hongo
Nightshade		buena mujer, trompillo
Oleander		adelfa, laurel-rosa auriel
Pigweed	chuhugia	quelite, bledo
Pine	huk	pino
Poison hemlock		yerba chinga
Poison ivy		yerba mala
Ponderosa pine		pino ponderosa, pinabete
Prickly poppy	nod	cardo santo, chicalote
Russian thistle		boladora
Snakeweed		yerba da la vibora
Tall fescue		alta fescua
Tansy mustard	shuh'uwad	pamiton, pamita
Tree tobacco	wiw	Don Juan
Tumbleweed		bolador
Whitethorn		vinorama

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