DIVISION OF PLANT INDUSTRY WORKSHOP

3 May 1995, 8:15-8:45, presented by Nancy C. Coile

Poisonous Plants

We will look at some of the poisonous principles (compounds) of plants, such as cardiac glycosides, alkaloids, diterpenes, cyanogenic glycosides, oxalates, nitrogen-containing compounds, resins, and certain proteins and amino acids. As you know, green plants produce simple sugars by combining CO2 and H20 with energy from the sun using a process called photosynthesis. Primary compounds used by the plant for nutrition and construction of the plant body are produced by rearranging these simple sugars into complex sugars, starches, pectins, cellulose, fats, amino acids, proteins, nucleic acids and other compounds for direct use by the plant. Plants also produce compounds which seem to have no explicit use by plants and these are termed "secondary compounds." Secondary compounds include the poisonous substances listed above as well as sesquiterpene lactones, flavonoids, betalains, essential oils, phenolics and others. Certain groups of plants produce unique secondary compounds which can characterize those groups of families, families, genera, or species. For example, the Solanaceae, Amaryllidaceae, Leguminosae, and Apocynaceae are well known for their production of alkaloids.

As you may have noted, poisons may also become medicinal when used in lower doses (e.g., digitalis, see below). Since the concentration of poisonous compounds in a plant varies with growing conditions, great care must be taken with herbal remedies to make sure the dosage is therapeutic and not poisonous.

Cardiac glycosides are diterpene compounds which stimulate the heart. These diterpenes are dangerous when sugar molecules [hence,glycoside] are attached to the complex steroid structure. Only vertebrates are affected by this class of compound, and it may be postulated that cardiac glycosides inhibit grazing by animals. Some plants notorious for cardiotonic agents are: *Digitaria purpurea* L. (Scrophulariaceae) and *Nerium oleander* (L. Apocynaceae). The Apocynaceae family is well known for its members which contain cardiac glycosides. Many of the poisons placed on arrows for hunting are cardiac glycosides. Monarch butterflies obtain from milkweeds (Asclepiadaceae) cardiac glycosides which are sequestered and give protection from repeated attack by birds.

Alkaloids are nitrogen-containing bases, usually with a heterocyclic ring. "Alkaloid" is somewhat a catch-all term and is difficult to define precisely, but these compounds affect the central nervous system. There are 3 main types of alkaloids: (1) true alkaloids, (2) protoalkaloids, (3) pseudoalkaloids. The 5,500+ true alkaloids are derived from a biogenic amine and include the following compounds: morphine from the opium poppy (*Papaver somniferum* L. in Papaveraceae); berberine from yellow Mexican poppy (*Argemone mexicana* L. in Papaveraceae); the arrow poison curare from several plants including *Strychnos toxifera* Benth. (Loganiaceae) and *Chondrodendron tomentosum* Ruiz & Pavon (Menispermaceae); coniine from poison hemlock (*Conium maculatum* L. in Umbelliferae); nicotine from such varied sources as *Nicotiana tabacum* L. (Solanaceae), Lycopodium (Lycopodiaceae, a fern ally), and Equisetum (Equisetaceae, a fern ally); atropine from *Atropa belladona* L.; cocaine from *Erythroxylum coca* Lam.; strychnine from *Strychnos nux-vomica* L. (Loganiaceae); and, quinine from *Cinchona* spp. (Rubiaceae).

Protoalkaloids lack the heterocyclic ring. Examples of protoalkaloids are ephedrine [similar to epinephrine (= adrenaline)] from *Ephedra sinica* L. and other *Ephedra* species (Ephedraceae, gymnosperm) and mescaline from peyote *Lophophora williamsii* (Salm-Dyck) J. Coulter (Cactaceae).

Pseudoalkaloids are apparently not derived from amino acids, but do contain nitrogen. They include compounds such as caffeine from *Coffea arabica* L. (Rubiaceae) and chocolate's theobromine and caffeine from *Theobroma cacao* L. (Sterculiaceae).

Diterpenes are 20-carbon compounds which are found in resins and latex. Gibberellic acid is a diterpenoid. Gossypol from *Gossypium hirsutum* L. (Malvaceae) and atractylate from *Atractylis gummifera* L. (Compositae)

interfere with oxidative phosphorylation in higher animals. [Diterpenoids of Verbenaceae inhibit feeding by tobacco cutworm.] The most bitter substance know is amarogentin, a diterpenoid.

Cyanogenic glycosides release prussic acid (=hydrocyanic acid) on hydrolysis. Cattle are frequently poisoned by eating wilted wild cherry leaves (*Prunus serotina* Ehrh. in Rosaceae) and *Sorghum halepense* (L.) Pers. (Johnson grass). The cyanogenic glycoside. responsible for the poisoning does not exist in the plant, but injury to the plant causes production of an enzyme which will enable production of the hydrogen cyanide. Pits of peaches, apricots, almond, etc. contain a cyanide compound called amygdalin, also known as laetrile which is used in cancer chemotherapy (illegal in the U.S.A.). Cyanide poisoning causes the blood to become bright red, due to blocking a respiratory enzyme (cytochrome oxidase) and causing oxygen starvation.

Glucosinolates (also called mustard oil glycosides) are found especially in the family Cruciferae and are sulfur compounds. The poisonous effect is due to enzymatic action to produce isothiocyanates which blister the skin and which can cause hyperthyroidism. Human poisoning has rarely occurred after ingestion of large amounts of horseradish tops and roots, *Armoracia rusticana* P. Gaertner, Meyer & Scheth. Cattle poisoning from several genera has been documented.

Oxalates (=oxalic acid) can reach high levels in wood sorrel (*Oxalis* spp.), rhubarb leaf blades [please eat only the petiole!] (*Rheum rhabarbarum* L. in Polygonaceae), and purslane (*Portulaca oleracea* L. in Portulacaceae). Calcium oxalates can be stored in the rhizomes or tubers of several members of the Araceae as needle-like crystals called raphides. These raphides can cause a terrible burning sensation due to embedding in tissues of mouth, for example: *Arisaema* spp. (jack-in-the-pulpit) and water arum (*Calla palustris* L.). Several cultivated aroids (e.g., *Dieffenbachia* spp. (dumbcanes, a reference to making one incapable of speech), *Monstera deliciosa* Liebm. (ceriman), *Philodendron* spp.; *Ca/adium* spp., *Anthurium* spp. (tailflowers); and the elephant ears, *Xanthosoma*, *Alocasia*, *Colocasia*) may contain a combination of dissolved calcium oxalates and raphides, leading to severe pain and even death through swelling of the throat which can result in asphyxiation.

Nitrates may be accumulated to a dangerous level by plants, especially.known in some species in the Compositae, Cruciferae and Leguminosae. After ingestion, these nitrates are changed into the more deadly nitrites, especially in ruminants. Blood turns dark brown, due to the interference with oxygen uptake by hemoglobin.

Resins are a very diverse group of compounds, which contain no nitrogen, are insoluble in water, and are often mixed with volatile oils. Some of these resins are very toxic and affect the heart, nerves and muscle tissue. Asclepias spp. (milkweeds, in Asclepiadaceae), Cicuta maculata L. (water hemlock, in Umbelliferae) are Kalmia latifolia L. (mountain laurel, in Ericaceae) examples of plants with toxic resins. Cannabis sativa L. (marijuana, in Cannabidaceae) contains a resin, tetrahydrocannabinol, which when dried can be toxic. Another toxic phenolic resin is urushiol, the compound which causes the allergic reaction to poison ivy (Toxicodendron [=Rhus] radicans (L.) Kuntze), poison sumac (T. vernix (L.) Kuntze), poison oak (T. pubescens P. Mill.) and the western poison oaks. Poison ivy poisoning can be very serious if the oozing watery blisters cover much of the skin surface, thus allowing infectious agents easy entry. Compounds exist which can wash away the resin, but casual washing may spread the urushiol to other pails of the body. Urushiol apparently is not spread through the bloodstream; rather, urushiol is absorbed directly through the skin. If urushiol is present in the watery blisters, scratching may spread poison ivy. Your dog who walked through poison ivy may bring the compound to you. Do not think you are immune to poison ivy poisoning; repeated exposure may induce sensitivity. Cortisone cream is usually prescribed to relieve symptoms.

Proteins may be poisonous. [Most of us are familiar with the proteins in snake venoms.] The protein abrin, one of the most poisonous substances known, is in *Abrus precatorius* L., the rosary pea. Ingestion of one of the beautiful shiny red and black seeds can kill an adult. Rosary pea is listed by Florida's Exotic Pest Plant Council as a Category I invasive and may be found as a vine in hammocks in South Florida.

Seeds of castor oil plant (*Ricinus communis* L. in Euphorbiaceae) contain ricin, another highly toxic protein. Two seeds can cause serious poisoning; eight seeds may be fatal due to blood cells agglutinating (clumping together), fluid forming in the lungs, and liver and kidney failure. Chewing the seeds for a laxative effect is not recommended. Castor oil is obtained from the seed, but because ricin is not soluble in oil, castor oil does not contain the deadly poison. Castor-bean, palma-christi and mole plant are other common names for this species which is common in waste places especially in South Florida.

Amino acids are the "building blocks of proteins" as we all learned back in grade school and are much smaller molecules than proteins. However, not all amino acids go into formation of proteins. For instance, canavanine is a toxic non-protein amino acid from jack bean, *Canavalia ensiformis* (L.) DC. The toxic amino acids are incorporated into proteins instead of the regular amino acids and then cause the proteins to be non functional. In the Leguminosae, the non-protein amino acids are more concentrated in seeds than elsewhere in these plants and may serve as natural pesticides.

This information on poisonous plants is presented to you for your reading pleasure and to help make you more aware of possible dangers in the workplace. Plants through time have developed compounds which make them better able to survive, often at the expense of insects or mammals which try to utilize the plants as food. Man has learned to manipulate some of these compounds for our advantage. And, over 40 species of insects have the ability to sequester and store plant toxins for their use. It is similar to "Spy vs. Spy" from Mad Magazine; each organism develops strategies for their benefit by overcoming another species' strategy, which then must develop a new strategy, etc. Meantime, we should be aware of possible toxic compounds in seemingly safe plants.

References

Blackwell, Will H. Poisonous and medicinal plants. Prentice Hall. Englewood Cliffs, New Jersey. 329 p.

Giannasi, David E. and Daniel J. Crawford. 1986. Bichemical systematics. II. a reprise. Evolutionary Biology 20: 25-248.

Harborne, J. B. 1977. Introduction to ecological biochemistry. Academic Press, New York. 243 p.

Hardin, J. W. 1973. Stock-poisoning plants of North Carolina. Bulletin No. 414 (revised).

Agricultural Experiment Station, North Carolina State University. Raleigh, North Carolina. 138 p.

Kingsbury, John M. 1964. Poisonous plants of the United States and Canada. Prentice-Hall, Inc. Englewood Cliffs, New Jersey. 626 p.

Lampe, Kenneth F. and Mary Ann McCann. 1985. AMA handbook of poisonous and injurious plants. American Medical Association, Chicago, Illinois. 432 p.

Lewis, Walter H. and Memory P. F. Elvin-Lewis. 1977. Medical Botany, plants affecting man's health. John Wiley & Sons, New York. 515 p.

Mabberley, D. J. 1987. The plant-book. Cambridge University Press. Cambridge, England. 706 p.

Morton, Julia F. 1977. Plants poisonous to people in Florida and other warm areas. Fairchild Tropical Garden, Miami, Florida 116 p. [This little book has the photographs which are framed and posted in DPI halls outside Personnel's and Botany's offices.]

Robinson, Trevor. 1980. The organic constituents of higher plants, their chemistry and interrelationships. Cordus Press, North Amherst, Massachusetts. 352 p.

Smith, Philip M. 1976. The Chemotaxonomy of plants. Elsevier, New York. 313 p.

PLANTS THAT POISON

HOUSE PLANTS

Toxic Part	Symptoms
Bulbs	Nausea, vomiting, diarrhea. May be fatal.
Leaves, Branches	Extremely poisonous. Affects the heart, produces severe digestive upset and has caused death.
All parts	Intense burning and irritation of the mouth and tongue. Death can occur if base of the tongue swells enough to block the air passage of the throat.
Seeds	Fatal. A single rosary pea seed has caused death. One or two castor bean seeds are near the lethal dose for adults.
	Bulbs Leaves, Branches All parts

FLOWER GARDEN PLANTS

1 LOWER OF WELLT LINE		
Larkspur	Young plant, Seeds	Digestive upset, nervous excitement, depression, May be fatal.
Monkshood	Fleshy roots	Digestive upset and nervous excitement.
Autumn crocus, Star-of-Bethlehem	Bulbs	Vomiting and nervous excitement.
Lily-of-the-valley	Leaves, Flowers	Irregular heart beat and pulse, usually accompanied by digestive upset and mental confusion.
Iris	Underground stems	Severe, but not usually serious, digestive upset.
Foxglove	Leaves	One of the sources of the drug digitalis, used to stimulate the heart. In large amounts, the active principles cause dangerously irregular heartbeat and pulse, usually digestive upset and mental confusion. May be fatal.
Bleeding heart (Dutchman's breeches)	Foliage, Roots	May be poisonous in large amounts. Has proved fatal to cattle.

VEGETABLE GARDEN PLANTS

Rhubarb	Leaf blade	Fatal. Large amounts of raw or cooked leaves can cause convulsions, coma, followed
		rapidly by death.

ORNAMENTAL PLANTS

Daphne	Berries	Fatal. A few berries can kill a child.
Wisteria	Seeds, Pods	Mild to severe digestive upset. Many children are poisoned by this plant.
Golden chain	Bean-like capsules in which the seeds are suspended	Severe poisoning. Excitement, staggering, convulsions and coma. May be fatal.
Laurels, Rhododendron, Azaleas	All parts	Fatal. Produces nausea and vomiting, depression, difficult breathing, prostration and coma.
Jessamine	Berries	Fatal. Digestive disturbance and nervous symptoms.
Lantana camara (red sage)	Green berries	Fatal. Affects lungs, kidneys, heart and nervous system. Grows in the southern U.S. and in moderate climates.
Yew	Berries, Foliage	Fatal. Foliage more toxic than berries. Death is usually sudden without warning symptoms.

TREES AND SHRUBS

Wild and cultivated cherries	Twigs, Foliage	Fatal. Contains a compound that releases cyanide when eaten. Gasping, excitement, and prostration are common symptoms that often appear within minutes.
Oaks	Foliage, Acorns	Affects kidneys gradually. Symptoms appear only after several days or weeks. Takes a large amount for poisoning. Children should not be allowed to chew on acorns.
Elderberry	Shoots, Leaves, Bark	Children have been poisoned by using pieces of the pithy stems for blowguns. Nausea and digestive upset.
Black locust	Bark, Sprouts, Foliage	Children have suffered nausea, weakness and depression after chewing the bark and seeds.

PLANTS IN WOODED AREAS

Jack-in-the-pulpit	All parts, especially roots	Like dumb cane, contains small needle-like crystals of calcium oxalate that cause intense irritation and burning of the mouth and tongue.
Moonseed	Berries	Blue, purple color, resembling wild grapes. Contains a single seed. (True wild grapes contain several small seeds.) May be fatal.
Mayapple	Apple, Foliage, Roots	Contains at least 16 active toxic principles, primarily in the roots. Children often eat the apple with no ill effects, but several apples may cause diarrhea.

PLANTS IN SWAMP OR MOIST AREAS

Water hemlock All parts	Fatal. Violent and painful convulsions. A number of people have died from hemlock.
-------------------------	--

PLANTS IN FIELDS

Buttercups	All parts	Irritant juices may severely injure the digestive system
Nightshade	All parts, especially the	Fatal, Intense digestive disturbances and nervous symptoms.
	unripe berry	
Poison hemlock	All parts	Fatal. Resembles a large wild carrot. Used in ancient Greece to kill condemned
		prisoners.
Jimson Weed (thorn apple)	All parts	Abnormal thirst, distorted sight, delirium, incoherence and coma. Common cause of poisoning. Has proved fatal.

A LIST OF SOME PLANTS KNOWN TO CAUSE DERMATITIS

A Guide for DPI Plant Protection and Environmental Specialists

Nancy C. Coile Botanist

Florida Department of Agriculture & Consumer Services

Division of Plant Industry PO Box 147100, Gainesville, FL 32614-7100

Bureau of Entomology, Nematology, and Plant Pathology – Botany Section Contribution No. 32

April 1995

A LIST OF SOME PLANTS KNOWN TO CAUSE DERMATITIS:

A Guide for DPI Plant Protection and Environmental Specialists¹

Nancy C. Coile²

This list includes plants which will likely cause dermatitis in plant protection and environmental specialists during normal handling procedures. Dermatitis is a term which describes inflammation of the skin. Ordinary plant dermatitis is termed contact urticaria by Lampe and McCann. Urticaria are itching skin eruptions. The degree of skin reaction to dermatitis-causing plants will vary from person to person.

Dermatitis may be caused by acrid or caustic chemicals present in the plants (e.g., *Hippomane mancinella*) and may cause rapid inflammation. Inflammation may be allergic in nature (e.g., poison ivy). In the case of poison ivy, inflammation occurs two or more days after contact and is caused by an allergen. Many persons are not allergic to poison ivy and will not exhibit the watery, itchy blisters typical of poison ivy poisoning. However, allergic reaction to poison ivy may develop at any time and one should not assume immunity. Some plants cause dermatitis to occur only after exposure to sun (photodermatitis). Photodermatitis may be caused by contact with or ingestion of certain plants. Dermatitis invoked by exposure to sunlight after ingestion (e.g., *Lantana camara* fruits) will not be considered in this list. Also not included on this list are plants which cause mechanical injury; patch testing results; plants which cause hay fever; wood being processed; preparations from plants (e.g., medicines, perfumes, lotions derived from plants); and long-term effects from constant handling (such as pineapple cutters).

The format for presentation of these data is alphabetical by plant species name or common name. The entry for a common name will refer to the scientific name. The scientific name is in italics and is followed by a common name in brackets (when available). Abbreviated information concerning type of dermatitis is given along with the reference which is indicated by footnote.

Be on the alert for members of Anacardiaceae, Euphorbiaceae, Ranunculaceae, and Araceae. These families are well-known for dermatitis-causing members. However, some families may have a single species which can cause dermatitis. Individuals who have contact dermatitis from one species in a family will frequently have reactions to some other species of the same family.

Abelmoschus esculentus [okra]-- occasional dermatitis to pickers*; allergic contact dermatitis#

Abies alba [silver fir]-- dermatitis from foliage[#]

Abrus precatorius [rosary pea]-- sap irritant #

Abutilon indicum [Indian mallow]-- dermatitis#

Acalypha [copper leaf]-- white latex of these species can cause acute dermatitis#

Acer negundo [box elder]-- pollen rarely causes red skin rash and blisters*

Achillea millefolium [yarrow]-- dermatitis#

Acidoton urens-- stinging hairs produce dermatitis#

Acokanthra oblongifolia (=A. spectabilis) [bushman's poison, or wintersweet]-- irritant to skin, eyes, and respiratory tract[#]

Acokanthera oppositifolia (=A. venenata) [bushman's poison, or wintersweet]-- irritant to skin, eyes, and respiratory tract[#]

Aconitum napellus [wolfsbane, monkshood]-- sap is irritant[#]

Adonis aestivalis, A. amurensis & A. vernalis-- irritant#

Aesculus pavia [buckeye] -- dust may be a respiratory and eye irritant*

African hemp, see: Sparmannia africana

Agave ssp. [century plant, sisal-hemp]-- rash, burning and itching of the skin and eye damage*

Aglaonema commutatum & A. modestum-- calcium oxalate crystals can irritate broken skin and mucous membranes[#]

Agrimonia eupatoria [common agrimony, beggars' tick]-- irritant#

agrimony, see: Agrimonia eupatoria

Ailanthus altissima [tree-of-heaven]-- odor causes headaches, nausea, red eyes#; sap irritating#*

Alcea rosea [hollyhock]-- hairy stems & leaves are irritant#

Aleurites fordii [tung oil tree]-- sap can irritate skin#

Aleurites moluccana [candlenut tree] -- latex can cause acute dermatitis

Alexandrian-laurel, see: Calophyllum inophyllum

Alexandrian senna, see: Senna alexandrina

Algerian ivy [Hedera canariensis]-- allergic dermatitis#

algodon de seda, see: Calotropis gigantea

Alisma [water plantain]-- leaves irritate skin#

allamanda, pink, see: Cryptostegia grandiflora

allamanda, wild, see: Urechites lutea & U. pinetorum

Allamanda cathartica [yellow allamanda]-- all parts may cause dermatitis in sensitive persons *#

Allamanda violacea [purple allamanda]-- dermatitis in sensitive persons*

Allium spp. [onions, garlic]-- allergic dermatitis after prolonged handling

¹Contribution No. 32, Bureau of Entomology, Nematology and Plant Pathology - Botany Section.

² Botanist, Florida Dept. Agriculture & Consumer Services, Division of Plant Industry, P.O. Box 147100, Gainesville, FL 32614-7100.

[®] = Lampe, K.F. and M.A. McCann. 1985. AMA Handbook of Poisonous and Injurious Plants. American Medical Association. 432 p.

^{\$ =} Jones, S.B. and A.E. Luchsinger. 1979. Plant Systematics. McGraw-Hill Book Company, New York, NY. 388 p.

^{* =} Perkins, K.D. and W.W. Payne. 1978. Guide to the poisonous and irritant plants of Florida. Institute of Food and Agricultural Sciences, University of Florida, Gainesville, Fl. Circular 441. 91 p.

^{# =} Mitchell, J. and A. Rook. 1979. Botanical Dermatology. Greengrass, Vancouver Ltd. 789 p.

[©]= information from DPI Plant Protection and Environmental Specialists. 1995.2

Alocasia spp. [elephant's ear]-- all may be irritant due to calcium oxalate crystals#

Alocasia macrorrhiza [giant elephant's ear]-- dermatitis and eye irritation in sensitive persons*#

Alocasia sanderiana [Kris plant]-- irritant#

Alpinia galanga [Siamese ginger]-- contact sensitivity#

alsike clover, see: Trifolium hybridum

Amaranthus retroflexus [redroot pigweed]-- irritation in 1 of 50[#]

amaryllis, see: Hippeastrum vittatum

Amaryllis belladonna [belladonna lily]-- has been recorded as an irritant#

Ambrosia artemisiifolia [ragweed]-- allergic contact dermatitis*#

Ambrosia trifida [giant ragweed]-- low sensitizing capacity#

Amomum xanthoides-- irritant#

Amorphophallus spp. [snake-palm, devil's tongue]-- irritating calcium oxalate crystals[#]

Ampelopsis arborea [pepper-vine]-- suspected of causing dermatitis*

Anacardium occidentale [cashew tree]-- burning, blistering and swelling of the mouth, lips and skin* [®]

Anagadenia berterii [pineland allamanda] -- caution: other similar species cause irritation*

Anagallis arvensis [scarlet pimpernel]-- cause of dermatitis*#

Ananas comosus [pineapple]-- dermatitis when juice rubbed into skin*

Anemone spp. [windflowers]-- irritant[#]

Anemone caroliniana [wind-flower]-- dermatitis, respiratory & eye irritation*

Angelica sp.-- dermatitis#

Annona reticulata [custard-apple]-- juice inflames eyes*

Annona reticulata [custard-apple, bullock's heart]-- acrid sap is irritant and causes conjunctivitis#

Anthemis arvensis [mayweed, corn-chamomile]-- irritant to skin and mucous membranes*#

Anthemis cotula [mayweed, stinking chamomile]-- strong irritant and also an allergenic#

Anthostema aubryanum & A. senegalense-- latex strongly caustic[#]

Anthurium spp. [tailflower]-- sap may cause dermatitis to sensitive skins and eye irritation*#

Antiaris toxicaria [upas tree]-- sap causes severe dermatitis#

Antidesma bunius [bignay] -- acute dermatitis from sap#

Apium graveolens [celery]-- severe dermatitis to celery harvesters* - caused by fungus#

Aquilegia vulgaris [a columbine] -- irritant#

Aralia spinosa [Hercule's club]-- bark and root may cause dermatitis*#

aralia, see: Polyscias

arborvitae, see: Thuja occidentalis

Arctium lappa [burdock]-- contact dermatitis#

Arctotheca calendulacea [capeweed]-- contact dermatitis#

Argemone albiflora [white prickly poppy]-- & A. mexicana [Mexican prickly poppy]--prickles may cause skin irritation[#]

Argythamnia griseum--irritant#

Arisaema spp., especially *A.dracontium* [greendragon] & *A.triphyllum* [jack-in-the-pulpit]-- skin and eye irritation*[#]

Armoracia rusticana [horseradish] -- irritant due to isothiocyanates (mustard oils)#

Arnica montana [wolf's bane]-- contact dermatitis#

Artemisia ludoviciana [prairie sage, cudweed, western mugwort]-- contact sensitivity due to sesquiterpene lactones[#]

artichoke, see Cynara scolymus

arum lily, see: Zanthedeschia

Arum spp., A. maculatum [cuckoo-pint]-- calcium oxalate crystals + another irritant#

Asarum spp. [wild-gingers]-- some cause dermatitis#

Asclepias spp., especially A. curassavica [scarlet milkweed]-- milky sap is skin and eye irritant*#

ash, see: Fraxinus

Asimina triloba [pawpaw]-- cause of dermatitis*#

Asparagus officinalis [edible asparagus]-- dermatitis#

Atropa belladonna [deadly nightshade]-- sap may cause dermatitis**, and visual problems*

azaleas, see: Rhododendron

В

Bahama whitewood, see: Canella winterana

Balfour aralia, see: Polyscias scutellaria 'Balfourii'

Baliospermum montanum [jungle jamalgota]-- latex from leaves and seed irritant#

balloon flower, see Cardiospermum halicacabum

balsam, see: *Impatiens* barberry, see: *Berberis*

bass wood, see: *Tilia americana* bedstraw, see: *Galium aparine*

Begonia spp.-- some sensitivity suspected[#] belladonna lily, see: Amaryllis belladonna

Berberis spp. [barberry]-- sharp spines cause inflammatory papules and nodules#

Bertholletia excelsa [Brazilnut]-- skin rash and eruptions in workers

bignay, see: Antidesma bunius

bitterweeds, see: Helenium

Bixa orellana [lipstick tree]-- leaves and unripe fruit may be irritant#

black walnut, see: Juglans nigra

blackeyed Susan, see: Rudbeckia hirta

blanket flower, see: Gaillardia

bleeding hearts, see: Dicentra spectabilis

blister bush, see: Phebalium anceps

blister bush, see: Peucedanum galbanum

blister creeper, see: Cardiospermum halicacabum

blood lilies, see: Haemanthus

blood-lily, see: *Haemanthus multiflorus* bloodroot, see: *Sanguinaria canadensis*

Blumenbachia spp. [sting lily]-- stinging hairs#

boat-lily, see: Tradescantia spathacea

bok choi, see: *Brassica rapa Boophane* spp. --a skin irritant[#]

Borago officinalis [borage]-- bristly hairs irritate#

bouncing bet, see: Saponaria officinalis

boxwood, see: Buxus sempervirens

box-elder, see: Acer negundo

Brachychiton populneum [kurrajong]-- seed cause irritation#

Brassica napus [rape]-- contains mustard oils#

Brassica nigra [black mustard (seeds form condiment)]-- contains mustard oils#

Brassica oleracea [broccoli, brussels sprouts, cabbage, cauliflower, collard, kale]-- contact dermatitis#

Brassica rapa [turnip, bok choi, napa cabbage]-- contact dermatitis#

Brazilian peppertree [Schinus terebinthifolius]--

Brazilnut, see: *Beriholletia excelsa* broccoli, see: *Brassica oleracea*

buckthorn, see: Rhamnus

buckwheat, see: Fagopyrum esculentum

bull-bay, see: Magnolia grandiflora

bullock's heart, see: *Annona reticulata* bur cucumber, see: *Sicyos angulata*

burdock, see: Arctium lappa

burning bush, see: Dictamnus albus

bushman's poison, see: Acokanthera

buta-buta, see: Excoecaria

butter & eggs, see: Linaria vulgaris

buttercups, see: Ranunculus

butterweed, see: Senecio glabellus

Buxus sempervirens [boxwood]-- sap can cause irritation and intense itching#

C

cabbage, see Brassica oleracea

Caiophora spp.-- stinging hairs#

cajeput, see: Melaleuca quinquenervia

caladium, see: Caladium picturatum

Caladium picturatum [fancy leaved caladium]-- may cause dermatitis to sensitive skin & eye irritation*#

Calceolaria integrifolia [pouch flower]-- mild eye irritation from cut plants#

Calendula officinalis [pot marigold]-- irritating#

calla lily, see; Zanthedeschia

Calliandra portoricensis [corpse-awakener]-- irritant sap; seeds cause sneezing#

Calliandra tetragona—dermatitis[#]

Caltha palustris [marsh-marigold]-- acrid sap causes blisters#

Calomeria amaranthoides [incense plant, crimson shower]-- allergic contact dermatitis#

Calophyllum inophyllum [Alexandrian laurel]-- sap irritant*#

Calotropis gigantea [giant milkweed, algodon de seda]-- irritant and caustic to skin and eyes*#

Calotropis procera [Sodom apple]-- irritant and caustic to skin and eyes*#

Campanula medium [Canterbury bells]-- contact dermatitis#

Campsis radicans [trumpet-creeper]--inflammation & blistering in some people*#

Cananga odorata [ylang-ylang tree]-- cananga oil & ylang-ylang oil are allergens in cosmetics#

candelabra-cactus, see: Euphorbia lactea

candlenut tree, see: Aleurites moluccana

Canella winterana [white cinnamon, Bahama whitewood]--can cause skin eruptions#

Cannabis sativa [marijuana, Indian hemp, grass]-- contact dermatitis from leaves or flowers in some#

Canterbury bells, see: Campanula medium

cape primrose, see: Streptocarpus rexii

Caperonia palustris-- stinging hairs#

caper-spurge, see: Euphorbia lathyris

capeweed, see: Arctotheca calendulacea

Capsicum annuum [hot peppers]-- fruits may cause burning or dermatitis#

Capsicum annuum var. aviculare [chilipiquin, hot pepper]-- inflammation & blistering of skin after prolonged exposure*

Caraipa densiflora-- sap caustic#

caraway, see: Carum carvi

cardamom, see: Elettaria cardamomum

Cardiospermum halicacabum [balloon flower, blister creeper]-- irritant#

cardon, see: Euphorbia lactea

Carica papaya [papaya] -- sap may rarely cause skin or eye irritation & blistering**

Carissa carandas [karanda]-- irritant latex#

carnation, see: Dianthus caryophyllus

Carolina jessamine, see: Gelsemium sempervirens

carrot, see: Daucus carota

Caryota mitis [tufted fishtail palm]-- irritant to skin & eyes*

Caryota urens [toddy fishtail palm]-- fibers may be irritating*

Carum carvi [caraway]-- contact sensitivity in some#

cashew tree, see: Anacardium occidentale

cassava, see: Manihot esculenta
Cassia augusifolia-- irritant[#]

Catalpa bignonioides [cigar-tree]-- flowers may cause dermatitis in some*

cator, see: Claoxylon marianum

cauliflower, see: Brassica oleracea

caustic vine, see: Sarcostemma australe

caustic weed, see: Euphorbia drummondii

Ceanothus velutinus [tobacco-brush]-- irritant

Cecropia spp.-- some species with caustic sap, and house stinging ants#

celandine poppy, see: Chelidonium majus

celery, see: Apium graveolens

century plant, see: Agave spp.

Cestrum nocturnum [lady-of-the-night]-- fragrance causes nose/throat irritation, headache#

Cevallia sp.-- stinging hairs[#]

chalice vines, see: Solandra

Chamaecyparis lawsoniana [Port Orford cedar, Lawson's cypress, Oregon cedar]--foliage can cause dermatitis#

Chamaesyce hirta [a spurge]-- may cause dermatitis to some persons*

chamomile, stinking- see, Anthemis cotula

chamomile, sweet false-, see: Matricaria recutita

chamomile, scentless false-, see: Tripleurospermum inodorum

chamomile, corn-, see: Anthe arvensis

chaste-tree, see: Vitex trifolia chayote, see: Sechium edule

Chelidonium majus [celandine poppy]-- sap is irritating to the eyes, can cause dermatitis#

Chenopodium album [lamb's quarters]-- positive reaction in 1 of 50 persons tested#

chick pea, see: Cicer arietinum

Chimaphila maculata [princess blue]-- irritant[#]

Chinese tallow tree, see: Sapium sebiferum

Christmas rose, see: Helleborus niger

chrysanthemums, see: Dendranthema spp.

Cicer arietinum [chick-pea]-- cultivators develop dermatitis#

Cichorium endivia [endive]-- allergic contact dermatitis#

cigar-tree, see: Catalpa bignonioides

Cionura erecta [marsdenia]-- sap blisters skin[#]

Cissus rhombifolia [grape-ivy]-- blistering sap#

Citrus spp. [several.species]-- oil of peel causes photodermatitis

citrus dye causes dermatitis in some#

Citrus aurantiifolia [lime]-- oil of fruit peel is photosensitizer# [®]

Citrus limon [lemon]-- lemon peel causes dermatitis#

Citrus sinensis [orange]-- fruit peel causes contact dermatitis in some#

Claoxylon marianum [panao, cator]-- latex causes acute dermatitis#

Clausena platyphylla-- caustic secretions#

Clematis spp. [virgin's bower]-- dermatitis to some persons* /acrid sap#

cleavers, see: Galium aparine

Cleome spinosa [spider flower]-- contact dermatitis#

cluster bean, see: Cyamopsis tetragonoloba

Clutia pulchella-- sap is irritating#

Cnesmone spp.-- stinging hairs#

Cnidoscolus stimulosus [spruge-nettle, tread-softly]-- painful dermatitis, inflammation, red rash & itching*#

cocklebur, see: Xanthium

Codiaeum variegatum var. pictum [croton]-- allergic dermatitis*#

Colchicum autumnale [crocus]-- corms are irritant#

Coleus (=Solenostemon)-- dermatitis#

Colliguaja odorifera-- irritant#

Colocasia spp., including C. esculenta [taro]-- sap may cause dermatitis to sensitive skin*

comfrey, see: Symphytum officinale

Conium maculatum [poison hemlock]-- dermatitis#

Consolida ajacis & C. regalis (=Delphinium) [larkspur]-- seeds and leaves cause dermatitis*#

Conyza canadensis [horseweed]-- suspected contact dermatitis in some*

Cordia cylindrical-- dermatitis from leaves#

Corn, see: Zea mays

corpse-awakener, see: Calliandra portoricensis

Coloneaster microphylla -- sap irritant[#]

cottonwood, see: Populus

cowitch cheny, see: Malpighia urens

cow-itch, see: Campsis radicans cow-itch, see: Mucuna pruriens

cow-parsnip, European, see: Heracleum sphondylium

crabgrass, see: Digitaria

Crateva religiosa [garlic-pear]-- leaves may cause blistering[#]

Crateva tapia [toco]-- caustic and acid sap#

cresote bush, see: Larrea tridentata

crimson shower, see: Calomenia amaranthoides

crocus, see: Colchicum autumnale

Croton capitatus [hogwort, wooly croton]-- can produce dermatitis#

Croton ciliato-glandulosa-- irritant to the eyes#

Croton cortesianus-- sap caustic#

Croton gratissimus-- irritating bark#

croton oil is a violent purgative--from Croton tiglium

croton, see: Codiaeum variegatum var. pictum

Croton capitatus [wooly croton]-- sap irritant to skin & eye*

crown of thorns, see: Euphorbia milii

crownbeard, golden, see: Verbesina encelloides

Cryptostegia grandiflora [pink allamanda, rubbervine]-- milky sap a severe skin irritant; dry vine dust irritates*#

Cryptostegia madagascarensis-- all parts of plant can cause contact dermatitis#

cudweed, see: Artemisia ludoviciana

cuckoo-pint, see Arum maculatum

Cucurbita moschata [Seminole pumpkin]-- skin irritaion due to bristly hairs#

Cuphea urens-- irritant#

custard-apple, see: Annona reticulata

Cyamopsis tetragonoloba [guar, cluster bean]-- dermatitis in cultivators#

Cycas revoluta [king sago] -- male cones respiratory irritant to some*

Cycas sp.-- dermatitis[©]

Cynara scolymus [globe artichoke]-- sesquiterpene lactones cause allergic contact dermatitis in some#

Cypripedium spp. [ladyslipper orchids]-- allergic dermatitis#

D

Dahlia spp.-- allergic contact dermatitis#

daisy, ox-eye, see: Leucanthemum vulgare

daffodil, see: Narcissus pseudonarcissus

Dalechampia-- stinging hairs#

Daphne gnidium-- dermatitis#

Daphne mezereum [spurge olive]-- all parts cause contact irritation#

Daphnopsis gnidium & D. oleoidies-- irritant#

Datura spp.-- irritant in sensitive persons#

Datura metel [black datura, devil's trumpet]-- sap may cause dermatitis*

Daucus carota [carrot]-- slight cause of photodermatitis in experiments*/ allergic contact dermatitis

deadly nightshade, see: Atropa belladonna

Delphinium, see: Consolida

Dendranthema spp. [chrysanthemums]-- allergic contact dermatitis in some*

Dendrocnide spp.-- hairs sting violently producing dermatitis and shock

devil's backbone, see: Pedilanthus tithymaloides

devil's cotton, see: *Theobroma augusta* devil's tongue, see: *Amorphophallus*

devil's trumpet, se Datura metel

Dianthus caryophyllus [carnation]-- acute dermatitis#

Dicentra spectabilis [bleeding hearts]--can cause dermatitis#

Dichapetalun cymosum-- young leaves cause tingling and burning sensation#

Diciamnus albus [burning bush]-- contact dermatitis#

Dieffenbachia spp., including D. seguine & D. maculata [dumbcanes]-- sap irritates & blisters skin*#0

Digitalis sp. [foxglove]-- contact sensitivity#

Digitaria spp. [crabgrass]-- contact dermatitis#

Dioscorea spp., including D. alata [white yam]-- causes itching and irritation#

Diospyros spp. [ebony, persimmon] listed as causing dermatitis: D. crassiflora, D. celebica, D. multiflora, D. samoensis[#]

Dirca palustris [leatherwood]-- irritation, blistering, inflammation to skin of some*

dock, see: Rumex

Doronicum pardalianches [leopard's bane]-- rash in some#

Douglas fir, see: Pseudotsuga menziesii

Dracunculus vulgaris [dragon arum]-- root is irritant#

dragon arum, see: *Dracunculus vulgaris Drimia* spp.-- bulbs intensely irritant#

Drosera rotundifolia [sundew]-- blisters formed by leaves#

duck potatoes, see: Sagittaria

dumbcane, see: Dieffenbachia seguine & D. maculate

 \mathbf{E}

Ecballium elaterium [squirting cucumber]-- sap irritating to eye

Echites umbellata [rubbervine] -- sap may cause irritation & blistering*

Echium vulgare [viper's bugloss]-- hairs cause dermatitis#

Elaeophorbia drupifera & E. grandiflora-- caustic latex#

Elaeoselinum asclepium & E. foetidum-- irritant#

elecampane, see: Inula helenium

elephant's ear, see: Alocasia macorrhiza

elephant's ear, see: Colocasia esculentum

elephant's ear, see: Xanthosoma sagittifolium

Elephantopus mollis-- irritating hairs on stem#

Elettaria cardamomum [cardamom]-- contact sensitivity to the seed*

elms, see: *Ulmus*

endive, see: Cichorium endivia

Endospermum moluccanum [moon tree]-- latex causes acute dermatitis#

Epipremnum aureum [pothos, hunter's robe]-- sap can cause dermatitis, "pothos poisoning" #

Epipremnum gigantum -- reportedly irritant#

Eragrostis spp. [love grasses]-- irritant to skin#

Erigeron Canadensis, see Conyza

Erigeron spp. [fleabanes]-- irritants cause contact dermatitis#

Eucalyptus spp. [gums]-- prolonged contact may cause dermatitis & blistering of skin*#

Eucnide spp.-- stinging hairs#

Eugenia uniflora [Surinam cherry]-- respiratory symptoms from trimming the plant#

Eupatorium spp.-- several species cause itching rash#

Euphorbia spp. [spurges]-- sap causes severe irritation, inflammation & blistering to many*

Euphorbia antiquorum-- latex can cause blindness#

Euphorbia balsamifera-- corrosive latex[#]

Euphorbia caput-medusae-- highly acrid latex#

Euphorbia cooperi-- extremely irritant latex; breathing near a wounded plant produces burning in throat

Euphorbia cotinifolia [red spurge]-- latex highly irritant and can cause blindness#

Euphorbia deightonii-- caustic latex#

Euphorbia drummondii [caustic weed]-- conflicting stories, possibly caustic#

Euphorbia esula (=Tithymalus)-- sap irritant to the eye#

Euphorbia gomerifera-- latex causes acute dermatitis#

Euphorbia grandidens-- may produce blindness#

Euphorbia guadichaudii-- latex causes acute dermatitis#

Euphorbia ingens-- acute bullous dermatitis#

Euphorbia lactea [candelabra-cactus]-- latex can cause rash, blisters, intense burning and temporary blindness#

Euphorbia laterifolia-- sap is corrosive, produces white patches on skin#

Euphorbia lathyris [caper spurge] -- sap causes itching, pimples and sometimes gangrene#

Euphorbia marginata [snow-on-the-mountain]-- caustic#

Euphorbia milii [crown of thorns]-- corrosive sap, caustic to skin, causing temporary blindness#

Euphorbia prestii [pasture spurge]-- severe irritation, temporary blindness#

Euphorbia pulcherrima [Christmas poinsettia]-- sap irritant[®]

Euphorbia terracina [false caper]-- severe corneal ulceration#

Euphorbia tetragona-- severe irritation and blindness#

Euphorbia tirucalli [pencil cactus, milk bush]-- latex can cause rash, blisters, intense burning and temporary blindness[#]

everlastings, see: Helipterum

Excoecaria agallocha [milky mangrove, buta-buta, river poison tree]-- single drop of sap caused severe inflammation of the eye, temporary blindness[#]

Excoecaria africanus [African sandalwood]-- sap is irritating

Excoecaria macrophy1la-- strongly irritant#

F

Fagopyrum esculentum [buckwheat]-- allergic skin reactions from contact*

false hemp, see: Fucraea

Fatoua villosa [greenhouse weed]-- causes mild itching#

feltleaf, see: Kalanchoe beharensis

Ficus carica [fig]-- itching & blistering*

Ficus ssp. [figs]-- photodermatitis* sap may cause eczema; may cause pigmentation lasting 30+ years[#]

Ficus pumila [climbing fig]-- sap may cause intense irritation of the eye#

Ficus tumila [wild Australian fig]-- sap can cause severe eye complications and permanent impairment

fig, see: Ficus carica

fir, see: Abies

firewheel, see: Gaillardia

fishtail palm, toddy, see: *Caryota urens* fishtail palm, tufted, see: *Caryota mitis*

flame vine, Mexican, see: *Senecio confusus* Flander's Field poppy, see: *Papaver rhoeas*

flannel plant, see: Verbascum thaspus

fleabanes, see Erigeron spp.

Fleurya spp.-- stinging hairs#

forget-me-not, see: Myosotis

foxglove, see: Digitalis

Fragaria sp. [strawberry]-- contact eczema#

frangipani, see: Plumeria

Fraxinus spp. pollen may rarely cause allergic dermatitis with rash & blisters*

Fucraea spp. [false hemp]-- dermatitis from handling the plant or its fibers#

Fuertesia-- stinging hairs#

 \mathbf{G}

Gaillardia spp. [blanket flower]-- contact dermatitis to some*#

Galium aparine [cleavers, bedstraw]-- contact dermatitis#

Garcinia gibbsae-- exudates said to cause blood poisoning#

garlic vine, see: Manosa alliacea

garlic, see: *Allium* spp. garlic-pear, see: *Crateva*

Gaudichaudia schiedeana-- irritating hairs#

Gelsemium sempervirens [Carolina jessamine] -- cause of dermatitis*

geranium-aralia, see: Polyscias guilfoylei

giant hogweed, see: Heracleum mantegazzianum

giant milkweed, see: Calotropis procera

Ginkgo biloba [maidenhair tree]-- severe skin irritation* dermatitis from fruits[#]

ginger, see: Zingiber officinalis

ginger, Siamese, see: Alpinia galanga

Girardinia spp.-- stinging hairs#

Gladiolus spp.-- an irritant*#

Glaucium flavum-- irritant properties#

Gloriosa spp.-- tubers are irritant

Gnidia spp.-- contain irritating resinous material#

gout stick, see: Jatropha podagarica

grape, see: Vitis vinifera

grape-ivy, see: Cissus rhombifolia

grass, see: Cannabis sativa

green dragon, see: Arisaema dracontium

Grevillea banksii [red silk-oak]-- blossoms cause contact dermatitis*#

Grevillea robusta [silk-oak]-- sap irritates eyes, produces blistering on skin*#

Gronovia scandens-- stinging hairs[#]

Guaiacum officinale [lignum vitae]-- leaves said to be acrid*

guar, see: Cyamopsis tetragonoloba

gums, see: Eucalyptus

gutta percha-tree, see: Excoecaria parvifolia

Gyrotaenia spp.-- stinging hairs#

Η

Haemanthus multiflorus [blood-lily]-- sap causes swelling of lips & tongue*

Haemanthus spp. [blood lilies]-- sap is irritant#

hairy indigo, see: Indigofera hirsuta

Hedera canariensis [Algerian ivy]-- sap causes dermatitis*#

Hedera helix [English ivy]-- irritating sap causes severe allergic dermatitis in some*#

hedge parsley, see: Torilis japonicus

Helenium spp. [sneezeweeds, bitterweeds]-- contact dermatitis#

Helianthus spp. [sunflowers]-- allergic reaction to pollen, possible allergic dermatitis#

Heliofropium spp. [heliotropes]-- contact dermatitis with several species*

Helipterum spp. [strawflowers, everlastings]-- contact sensitivity#

Helleborus niger [Christmas rose]-- bruised foliage & rootstock irritant#

hens & chickens, see: Sempervivum montanum

Hepatica nobilis [liverleaf]-- irritant[#]

Heracleum dulce-- photodermatitis#

Heracleum mantegazzianum [giant hogweed]-- photosensitivity from sap#

Heracleum nepalense-- acrid irritant sap

Heracleum sphondylium [hogweed, European cow-parsnip]-- photodermatitis#

Heracleum stevenii (=H. giganteum)--acute dermatitis from sap#

Hercules' club, see: Aralia spinosa

Hesperocnide spp.-- stinging hairs#

Hibiscus irritans-- irritating stellate hairs#

Hibiscus panduriformis-- irritating bristles#

Hippeastrum vittatum [amaryllis]-- suspected to cause dermatitis*

Hippobroma longifolia [star-of-Betlehem]-- irritating sap; a drop of sap in the eye can cause blindness#

Hippomane mancinella [manchineel]-- severe contact dermatitis, burning, swelling & blistering*#

hogweed, see: Heracleum sphondylium

hogwort, see: Croton capitatus

hollyhock, see: Alcea rosea

Homalanthus nutans -- irritating#

Homalomena spp.-- some are irritant#

honeysuckle, Italian-, see: Lonicera caprifolium

hop horn beam, see: Ostrya virginiana

hops, see: Humulus

horn poppy,. see: Roemeria hybrida

horsemint, see: Monarda punctata

horseradish, see: *Armoracia rusticana* horseradish tree, see: *Moringa oleifera*

horseweed, see: Conyza canadensis

houseleek, see: Sempervivum tectorum

Hulsea heterochroma-- sap is irritating#

Humulus lupulus [hops]-- & H. japonicus [hops]-- hairs on bracts of fruits cause irritation & dermatitis#

hunter's robe, see: Epipremnum aureum

Hura crepitans [sandbox tree]-- sap irritates skin, causing swelling & blistering, may cause temporary blindness*[#]

hyacinth, see: Hyacinthus orientalis

Hyacinthus orientalis [hyacinth]-- dermatitis in sensitive individuals*#

Hydrangea-- dermatitis in florists[#]

Hylotelephium telephium [orpine, live forever]-- acrid sap irritates skin#

Hypericum spp. [St. John's worts]-- contact dermatitis[#]

Hypericum perforatum [St. John's wort]-- photosensitizer to grazers*

I

Impatiens spp. [balsam, sultana, etc.]-- possible irritation#; I capensis used medicinally.*

incense plant, see: Calomeria amaranthoides

Indian hemp, see: Cannabis sativa

Indian mallow, see: Abutilon indicum

Indigofera hirsuta [hairy indigo] -- hairs cause skin irritation*

Inula graveolens [stinkwort]-- allergic contact dermatitis#

Inula helenium [elecampane]-- allergic contact dermatitis#

*Ipomoea alb*a [moonflower]-- may cause dermatitis in some**

Iris spp.-- cause contact dermatitis in some, especially florists*#

Iva spp. [marsh elder]-- allergic contact dermatitis#

ivy, English, see: *Hedera helix*

J

Jack-in-the-pulpit, see: Arisaema triphyllum

Jacaranda spp.-- may cause irritation[#]

Jasminum officinale [jasmine]-- handling or wearing flowers can cause irritant and allergic dermatitis#

jasmine, see: Jasminum officinale

Jatropha curcas [physic nut]-- sap may cause dermatitis & eye irritation*#

Jatropha gossypiifolia-- sap can cause dermatitis#

Jatropha multifida [coral plant]-- sap can cause dermatitis#

Jatropha podagarica [gout stick]-- sap can cause dermatitis#

Jatropha urens [pringamoza] -- stinging hairs cause intense pain and inflammation

Juglans nigra [black walnut]-- prolonged contact with sap caused dermatitis in some*

jungle jamalgota, see: Baliospermum montanum

juniper, see: Juniperus

Juniperus spp. [junipers]-- may cause dermatitis in some*

K

Kalanchoe beharensis [feltleaf]-- dermatitis[©]

karanga, see: Carissa carandas

karaya gum, see: Sterculia urens

kiss-me-over-the-garden-gate, see: Polygonum orientale

Knowltonia spp.-- irritant[#]

Koompassia excelsa [tualang]-- sap produces an erysipelas like inflammation[#]

kris plant, see: Alocasia sanderiana

kurrajong, see: Brachychiton populneum

L

ladyslipper orchids, see: Cypripedium

Lactuca sativa [garden lettuce]-- allergic contact dermatitis#

lady-of-the-night, see: Cestrum nocturnum Iamb's quarters, see: Chenopodium album

Lantana camara [wild sage]-- leaves cause contact dermatitis*#

Laportea canadensis [wood nettle]-- painful dermatitis, red rash & itching*

Laportea spp. [stinging nettles]-- stinging hairs#

larkspur, see: Consolida

Larrea tridentata [creosote bush]-- allergic contact dermatitis#

Lawson's cypress, see: Chamaecyparis lawsoniana

leadwort, see: *Plumbago auriculata* leatherwood, see: *Dirca palustris*

lemon, see: Citrus limon

Leonotis nepetaefolia [lion's ears]-- contact causes burning rash to some*#

Leonurus cardiaca [motherwort]-- dermatitis#

leopard's bane, see: Doronicum pardalianches

lettuce, see: Lactuca sativa

Leucanthemum vulgare [ox-eye daisy]-- dermatitis#

Leucojum vernum [snowflake]-- causes dermatitis#

lignum vitae, see: Guaiacum officinale

Ligustrum spp. [privet]-- respiratory irritants when in bloom*

Ligustrum amurense [Amur privet]-- caused dermatitis[#]

Ligustrum vulgare [European privet]-- irritant properties#

lilac, see: Syringa vulgaris

lime, see: Citrus aurantiifolia

lime, Spanish-, see: *Melicoccus bijugatus Linaria vulgaris* [butter & eggs]-- irritant[#]

lion's ears, see: Leonotis nepetaefolia

lipstick tree, see: Bixa orellana

Litsea sp.-- sticky sap reputedly irritant to skin#

live forever, see: Hylotelephium telephium

liverleaf, see: Hepatica nobilis

Loasa spp.-- stinging hairs#

Lobelia spp. -- leaves, stems and fruits said to be irritant, producing dermatitis#

Lobelia philippinensis-- latex capable of causing blindness[#]

Lonicera caprifolium [Italian honeysuckle]-- dermatitis reported#

love grasses, see: Eragrostis

lucky nut, see: Thevetia peruviana

lungwort, see: Pulmonaria

Lycopersicon esculentum [tomato]-- dermatitis from wet plants[#]

M

Macaranga hispida-- brittle irritating hairs#

Macaranga thomsonii [pengua]-- sap can cause dermatitis#

Maclura pomifera [osage-orange]-- sap cause contact dermatitis#

Magnolia grandiflora [bull-bay, southern magnolia]-- bruised leaves may cause dermatitis in some#

maidenhair tree, see: Ginkgo biloba

Malachra urens-- dermatitis[#]

Malpighia linearis-- fine irritant hairs on lower leaf surface#

Malpighia polytricha-- irritating hairs on lower leaf surface#

Malpighia urens [cowitch cherry, touch-me-not]-- stinging hairs, skin reactions#

mammee zapota, see: Pouteria sapote

manchineel, see: Hippomane mancinella

Mangifera indica [mango] -- sap causes dermatitis; pollen causes respiratory difficulty #0

mango, see: Mangifera indica

Manihot esculenta [cassava manioc, tapioca]-- sap can cause dermatitis[#]

manioc, see: Manihot esculenta

Manosa alliacea [garlic vine] -- prolonged exposure to odor causes facial burning & swelling, gagging &

coughing*#

marigold, African, see: Tagetes erecta

marigold, Aztec, see: Tagetes erecta

marigold, big, see: Tagetes erecta

marigold, French, see: Tagetes patula

marigold, pot-, see: Calendula officinalis

marijuana, see: Cannabis saliva

marsdenia, see: Cionura

marsh elder, see: Iva

marsh-marigold, see: Caltha palustris

Matricaria recutita [sweet false chamomile]-- dermatitis#

May-apple, see: *Podophyllum peltatum*

mayweed, see: Anthemis arvensis

meadow rue, see: Thalictrum

medlar, see: Mespilus germanica

Melanolepis multiglandulosa-- sap can cause dermatitis[#]

Melaleuca quinquenervia [paperbark, cajeput]-- branches, seed pods and volatile vapors can produce dermatitis#

Melicoccus bijugatus [Spanish-lime]-- contact dermatitis#

Mentha spp. [mints]-- may cause dermatitis in some#

Mentzelia spp.-- stinging hairs[#]

Mesembryanthemum spp. [ice plants]-- cause allergic dermatitis

Mespilus germanica [medlar]-- dermatitis from leaves#

*Metopium toxiferu*m [poisonwood]-- causes mild rash to severe blistering, fever, etc.*[®]

milk bush, see: Euphorbia tirucalli and Synadenium grantii

milkweeds, see: Asclepias

milky mangrove, see: Excoecaria agallocha

mint, see: Mentha

monkey-pod, see: Pithecellobium dulce

monkshood, see: Aconitum napellus

Monstera deliciosa [cut-leaf philodendron]-- sap may cause dermatitis to those sensitive, & eye irritation*#

moonflower, see: Ipomoea alba

Monarda punctata [horsemint]-- infrequent skin sensitizer#

Moringa olifera [horseradish tree]-- irritant to skin*

Morus rubra [red mulberry]-- suspected cause of dermatitis*

Moses in the cradle, see: Tradescantia spathacea

mother-in-law tongue, see: Sansevieria

motherwort, see: Leonurus cardiaca

Mucuna pruriens [cow-itch (from Hindi word kewach)]-- irritating hairs cause itching, eye inflammation &

burning***

mugwort, see: Artemisia ludoviciana

mulberry, see: Morus

mullein, see: Verbascum thaspus

Muscari racemosum -- reportedly irritant#

mustard (leafy) see: Brassica oleracea

mustard (seed), see: Brassica nigra

Myosotis spp. [forget-me-not]-- may produce irritation*

N

Nama hispidum-- blistering of skin noted#

Nanocnide spp.-- stinging hairs#

napa cabbage, see: Brassica rapa

Narcissus pseudonarcissus [daffodil]-- bulbs, petals & sap cause dermatitis in some*

nasturtium, see: Tropaeolum majus

nephythytis, see: Syngonium

Nerium oleander [oleander]-- contact with leaves or sap causes dermatitis in some*#

nettle, field-, see: *Urtica chamaedryoides*

nettle, spurge-, see: Cnidoscolus stimulosus

nettle, stinging-, see: Urtica urens

nettle, wood, see: Laportea canadensis

Nicotiana tabacum [tobacco]-- sap is a skin irritant*#®

niove, see: Staudtia stipitata

Nothaphoebe panduriformis-- sap may cause blisters#

 $\mathbf{0}$

Obetia spp.-- stinging hairs#

Ocimum sanctum-- respiratory initant[#]

Oenanthe sp.-- acrid irritants[#]

okra, see: Abelmoschus esculentus

oleander, see: Nerium oleander

onions, see: Allium spp.

Onobrychis viciifolia (=O.sativa) [holy clover]-- dermatitis#

orange, see: Citrus sinensis

Oregon cedar, see: Chamaecyparis lawsoniana

Oregon myrtle, see: Umbellularia californica

Ornithogalum spp.-- calcium oxalate raphides in bulbs & leaves may cause intense irritation[#]

orpine, see: Hylotelephium telephium

ortiga, see: Wigandia caracasana

osage-orange, see: Maclura pomifera

Ostrya virginiana [hop horn bean]-- stinging hairs at base of fruit[#]

Ottelia alismoides-- said to cause redness#

oyster plant, see: Tradescantia spathacea

P

pagoda tree, see: Plumbago alba

painted-leaf, see: Poinsettia heterophylla

Panacratium zeylandicum-- roots are irritant#

panao, see: Claoxylon marianum

Papaver dubium [European poppy]-- contact dermatitis#

Papaver rhoeas [Flander's Field poppy]-- irritant properties[#]

papaya, see: Carica papaya

paperbark, see: Melaleuca quinquenervia

Paris quadrifolia-- irritant[#]

parsley, see: Petroselinum crispum

parsnip, see: Pastinaca sativa

Parthenium spp.-- serious dermatitis in some persons#

Parthenocissus quinquefolia [Virginia creeper]-- possible cause of dermatitis#

pasque flower, see: Pulsatilla vulgaris

Pastinaca sativa [parsnip]-- phytophotodermatitis#

pasture spurge, see: Euphorbia preslii

pawpaw, see: Asimina triloba peace lily, see: Spathiphyllum peach, see: Prunus persica

Pedilanthus tithymaloides [devil's backbone] -- very irritant to some, causing rash, burning, blistering; eye

inflammation*#

Pelargonium x hybridum [geranium]-- rash[®]

pencil-cactus, see: Euphorbia tirucalli

pengua, see: Macaranga thomsonii

pepper, see: Capsicum annuum

pepper, hot, see: Capsicum annuum var. aviculare

pepper-vine, see: Ampelopsis arborea

Perilla frutescens-- dermatitis after long exposure#

pesticides-- such as malathion-- may cause contact derrnatitis[#]

Petroselinum crispum [parsley]-- dermatitis[#]

Petunia spp.-- minor sensitizer#

Peucedanum galbanum [blister bush]-- severe blistering from slight contact#

Phacelia spp.-- some species cause dermatitis similar to poison ivy dermatitis#

Phebalium anceps & P. argenteum [blister bush]-- phytophotodermatitis from contact#

philodendron, cut-leaf, see: Monstera deliciosa

Philodendron spp. [philodendron]-- sap may cause dermatitis to sensitive skin and eye irritation*³

Phylloslachys pubescens [bamboo, used for bamboo shoots]-- dermatitis apparently due to flowers#

physic nut, see: Jatropha curcas

Phytolacca americana [pokeweed]-- causes inflammation of skin and eyelids#

piggyback plant, see: Tolmiea menziesii

pigweed, redroot, see: Amaranthus retroflexus

pineapple, see: Ananas comosus

pineland allamanda, see: Anagadenia berterii

Pistachia spp. -- some species are irritants[#]

Pistia stratiotes [water lettuce] -- sap may cause dermatitis to sensitive skin & eye irritation*

Pithecellobium dulce [monkey-pod]-- skin irritation and swelling of eye lids & weakened sight*#

Platanus spp. [sycamore]-- wooly hairs rub off, cause allergic reactions#

Pleum pratense [Timothy grass]-- dermatitis#

Plumbago auriculata (=P. capensis) [leadwort]-- very irritant to skin, blistering skin of some*#

Plumbago alba [pagoda tree, frangipani]-- latex corrosive to the skin[#]

Plumenia rubra [frangipani]-- very irritating to skin of some after prolonged contact, with burning & blistering*[#]

Podophyllum peltatum [May-apple]-- rootstock causes severe dermatitis to some & eye irritation*

Poinsettia heterophylla [painted-leaf]-- sap is a skin irritant*

poinsettia, Christmas, see: Euphorbia pulcherrima

poison hemlock, see: Conium maculatum

poison ivy, see: Toxicodendron radicans

poison oak, see: *Toxicodendron querifolium* poison sumac, see: *Toxicodendron vernix*

poisonwood, see: *Metopium toxiferum* pokeweed, see: *Phytolacca americana*

Polygonum aviculare [wireweed]-- allergic dermatitis#

Polygonum hydropiper [smartweed, water pepper]-- caused burning and itching#

Polygonum hydropiperioides [smartweed, water pepper]-- irritant#

Polygonum orientale [kiss-me-over-the-garden-gate]-- irritant#

Polygonum persicaria-- acrid sap irritates eyes#

Polygonum punctatum [dotted smartweed, poor man's pepper, water pepper]-- irritant sap#

Polyscias scutellaria 'Balfourii' [Balfour polyscias]-- itching rash to many; but with sores & swelling in sensitive people**

Poncirus trifoliata [trifoliate orange]-- fruits cause dermatitis to sensitive skin after long exposure*

pondweed, see: Potamogeton

poor man's pepper, see: Polygonum punctatum

poppy, see: Argemone; Chelidonium; Papaver; Roemeria

Populus spp. [cottonwood]-- pollen rarely causes allergic dermatitis with red skin rash & blisters*

Port Orford cedar, see Chamaecyparis lawsoniana

pot marigold, see: Calendula officinalis

Potamogeton illinoiensis [pondweed]-- irritation#

potato, see: Solanum tuberosum

pothos, see: Epipremnum aureum

pouch flower, see: Calceolaria inregrifolia

Pouteria sapote [mammee zapote]-- sap is caustic and causes blisters#

prairie sage, see: Artemisia ludoviciana

prickly poppy, white, see: Argemone albiflora and Mexican prickly poppy, see. A. mexicana

primrose, see: Primula

Primula obconica [German primrose]-- itching dermatitis to about 6% of population* /weeping eruptions

princess blue, see: Chimaphila maculata

pringamoza, see: Jatropha urens

privet, see: Ligustrum

Prosopis africana-- leaves irritant#

Prostanthera sp.-- suspected to cause dermatitis#

Prunus persica [peach]-- fruit fuzz is mechanical irritant, later sensitization#

Pseudotsuga menziesii [Douglas fir]-- may cause allergic dermatitis#

Ptelea spp. [wafer ashes]-- photodermatitis#

Pulmonaria officinalis [lungwort]-- possible allergic sensitization[#]

Pulsatilla vulgaris (=Anemone patens) [pasque flower]-- irritant[#]

purple allamanda, see: Allamanda violacea

purple heart, see: *Tradescantia pallida* purple queen, see: *Tradescantia pallida*

pyrethrum,. see: Tanacetum cinerariifolium

Q

queen's delight, see: Stillingia sylvatica

 \mathbf{R}

ragweed, see: Ambrosia artemisiifolia

Ranunculus spp. [buttercups]-- irritant sap#

rape, see: Brassica napus

Raphanus sativus [radish]-- irritation due to isothiocyanates#

Rauvolfia spp. [source of alkaloids, esp. reserpine]-- some with irritating latex#

red buckeye, see: Aesculus pavia

red pimpernel, see: Anagallis arvensis

Reseda spp.-- irritant#

Rhamnus spp. [buckthorn]-- irritant sap#

Rheum x cultorum [rhubarb]-- leaf blade's oxalates cause dermatitis#

Rhododendron [azaleas & rhododendrons]-- dermatitis on arms from cutting#

Rhoeo, see: Tradescantia spathacea

rhubarb, see: Rheum

ricepaper plant, see: *Tetrapanax papyriferus* river poison tree, see: *Excoecaria agallocha*

Roemeria hybrida [violet flowered horn poppy]-- irritant*

rosary pea or bean, see: *Abrus precatorius* rubbervine, see: *Cryptostegia grandiflora*

rubbervine, see: Echites umbellata

Rudbeckia hirta [blackeyed Susan]-- contact sensitivity#

rue, see: Ruta graveolens

Rumex crispus [curly dock]-- allergic dermatitis#

Ruta graveolens [common rue]-- burning, itching, blisters; photodermatitis[#]

rye, see: Secale cereale

 \mathbf{S}

sage, wild-, see: Lantanaa camara

Sagittaria ssp. [duck potatoes]-- tubers of some species cause dermatitis#

sago, king, see: Cycas revoluta

sandalwood tree, African: Excoecaria africanus

sandbox tree, see: Hura crepitans

Sanguinaria canadensis [bloodroot]-- sap is a skin & eye irritant*

Sansevieria spp. [mother-in-law- tongue]-- may cause dermatitis#

Sapindus saponaria [soapberry]-- may cause contact dermatitis to some*

Sapium aubletianum-- irritant latex#

Sapium glandulosum-- latex is caustic#

Sapium indicum-- latex blisters skin#

Sapium insigne-- acrid, vesicant latex#

Sapium malagascariense-- latex is vesicant for skin; smoke from leaves causes blindness#

Sapium sebiferum [Chinese tallow tree]-- latex is acrid and vesicant#

Saponaria officinalis [bouncing bet, soapwort]-- sap is irritant#

Sarcostemma australe [caustic vine]-- latex blisters skin[#]

Sauromatum venosum (=S.guttatum) [voodoo-lily]-- highly irritant[#]

scarlet milkweed, see: Asciepias curassavica

scarlet pimpernel, see: Anagallis

Schima noronhae & S. wallichii-- sap irritating#

Schinus terebinthifolius [Brazilian peppertree]-- trimming plants causes itching dermatitis & sometimes eye inflammation*

Scilla spp.-- irritant[#]

Scyos angulata [bur cucumber]-- sap causes burning#

Seaside mahoe, see: Thespesia populnea

Sebastiana sp.-- cause dermatitis[#]

Secale cereale [rye]-- contact sensitivity reported[#]

Sechium edule [chayote] -- sap from skin of fruit can numb the hands[#]

Sedum purpureum, see: Hylotelephium telephium

Sempervivum montanum [hens & chickens]-- leaves cause dermatitis#

Sempervivum tectorum [houseleek]-- sap is irritant#

Seminole pumpkin, see: Cucurbita moschata

Senecio confusus [Mexican flame vine]-- may cause a rash, itching & swelling to some*#

Senecio glabellus [butterweed]-- may cause severe dermatitis*

Senna acutifolia [Alexandrian senna]-- dermatitis#

Senna siamea [Siamese shower]-- a skin & eye irritant*

Setcreasea purpurea, see: Tradescantia pallida

Siamese shower, see: Senna siamea

Sida urens-- irritant#

silk-oak, see: Grevillea banksii & G. robusta

sisal-hemp, see: Agave spp.

Sium erectum-- irritant[#]

Sium latifolium [water parsnip]-- skin irritation#

Sloanea quadrivalvis-- seeds capsules have irritating hairs#

smartweed, see Polygonum

snake-palm, see: Amorphophalus

sneezeweeds, see: Helenium

snow-on-the-mountain, see: Euphorbia marginata

snowflake, see: *Leucojum vernum* soapberiy, see: *Sapindus saponaria*

soapwort, see: Saponaria officinalis

Solandra longiflora & S. nitida [chalice-vines]-- sap may cause dilation & blindness*

Solanum mauritianum-- dermatitis#

Solanum tuberosum [potato] -- contact dermatitis#

Solanum xantii-- eruptions on delicate skins#

Spanish turpeth root, see: Thapsia garganica

Spanish-lime, see: Melicoccus bijugatus

Sparmannia africana [African hemp]-- irritating hairs[#]

Spathiphyllum wallisii 'Clevelandii' [Cleveland peace lily]-- intensely irritating calcium oxalate crystals#

Sphaerostylis malaccensis [climbing croton]-- stinging hairs in this and other species#

Sphedamnocarpus pruriens-- intensely irritating, bifurcated hairs#

spider flower, see: Cleome spinosa

Spigelia anthelmia & S. glabrata-- irritant#

spurge, see: Euphorbia spp.

spurge, see: Chamaesyce hirta

spurge-nettle, see: Cnidoscolus stimulosus

spurge-olive, see: *Daphne mezereum* spurge, red-, see: *Euphorbia cotinifolia*

squirting cucumber, see: *Ecballium elaterium*

St John's wort, see: Hypericum perforatum

star-of-Bethlehem, see: Hippobroma longiflora Note: Ornithogalum has same common name.

Staudtia stipitata [niove]-- skin irritant[#]

Sterculia urens [karaya gum]-- irritant hairs on stems and fruits#

Stillingia sylvatica [queen's delight, yaw root]-- irritating#

Stillingia texana-- latex produced blisters on skin#

stinging nettle, see: *Urtica urens* stinging nettles, see: *Laportea*

stinking Roger, see: Tagetes minuta

stinkwort, see: Inula graveolens

strawberry, see: Fragaria

strawflowers, see: Helipterum

Streblus brunoniana [whalebone tree]-- sap severely irritating to eyes#

Streptocarpus rexii [cape primrose]-- can cause dermatitis#

sulphur-- may cause contact dermatitis#

sundew, see: Drosera

sunflowers, see: Helianthus

Surinam cherry, see: Eugenia uniflora

sycamore, see: Platanus

Synadenium cupulare-- irritant and vesicant, may lead to blindness#

Synadenium grantii [African milk bush]-- latex extremely irritant[#]

Synadenium kirkii-- latex irritant#

Syngonium podophyllum [nephthytis]-- irritation from calcium oxalate crystals^{#20}

Syringa vulgaris [lilac]-- may cause dermatitis#

sultana, see: Impatiens

Symphytum officinale [comfrey]-- hairs have irritant properties*

T

Tagetes erecta [African marigold, Aztec marigold, big marigold]-- leaves irritant to some#

Tagetes minuta [stinking Roger]-- sap irritant to skin and eyes#

Tagetes patula [French marigold]-- leaves irritant to some#

tailflower, see: Anthurium spp.

tallow tree, see: Sapium sebiferum

Tanacetum cinerariifolium [pyrethrum]-- allergic contact dermatitis#

tapioca, see: *Manihot esculenta* taro, see: *Colocasia esculentum*

Tetracera rotundifolia-- young branches produce irritation[#]

Tetrapanax papyriferus [ricepaper plant]-- pollen causes severe dermatitis to some*#

Thalictrum spp. [meadow rues]-- irritant#

Thapsia garganica [Spanish turpeth root]-- acrid sap irritates#

Theobroma augusta [devil's cotton]-- irritant hairs#

Thespesia populnea [seaside mahoe]-- dermatitis#

Thiadiantha dubia-- severe dermatitis#

Thevetia peruviana [lucky nut; yellow oleander]-- sap a severe skin irritant, causing burning & inflammation; eye irritant*[#]

Thuja occidentalis [arborvitae]-- suspected to cause skin irritation in some*#

Thuja orientalis-- contact dermatitis#

thunderwood, see: Toxicodendron vernix

Thymelaea tartonraira-- irritant#

Tilia americana [bass wood]-- incorrectly? said to produce dermatitis; Bassia meant?#

timothy grass, see: Phleum pratense

tobacco, see: Nicotiana tabacum

tobacco-brush, see: Ceanothus velutinus

toco, see: Crateva tapia

Tolmiea menziesii [piggybank plant]-- dermatitis#

tomato, see: Lycopersicon esculentum

toothache tree, see Zanthoxylum

Torilis japonicus [hedge parsley]-- skin rash in susceptible[#]

touch-me-not, see: *Malpighia urens* [note: *Myosotis* is also touch-me-not]

Toxicodendron quercifolium [poison oak]-- in those susceptible: severe dermatitis, burning, itching, rash, watery blistering*[©]

Toxicodendron radicans [poison ivy]--75% of population: severe dermatitis, burning, itching, rash, watery blistering*[©]

Toxicodendron vernix [poison sumac]-- severe dermatitis, burning, itching, rash, watery blistering*

Tradescantia pallida [purple queen, purple heart]-- sap causes instant stinging red rash#

Tradescantia spathacea [oyster plant, Moses in the cradle]-- itching skin rash & eye irritation; burning & blistering**

Tragia ssp.-- many have stinging hairs#

tread-softly, see: Cnidoscolus stimulosus

tree-of-heaven, see: Ailanthus altissima

trifoliate orange, see: Poncirus trifoliata

Trifolium hybridum [alslike clover]-- contact. with leaves causes dermatitis#

Tripleurospermum inodorum [scentless hayweed, scentless false chamomile]-- contact dermatitis#

Tropaeolum majus [garden nasturtium]-- contact sensitivity#

trumpet-creeper, see: Campsis radicans

tualang, see: Koompassia excelsa

Tulipa spp. [tulip]-- contact dermatitis to som*#

tung oil tree, see: Aleurites fordii

turnip, see: Brassica rapa

turpeth root, Spanish, see: Thapsia garganica

Tylophora spp.-- alkaloids cause skin blistering*

Typhonium spp.-- contain calcium oxalate crystals which may be irritating[#]

Ulmus spp. [elms]-- pollen rarely caused allergic dermatitis with red skin rash & blisters*

Ulmus campestris & U. montana [elms]-- acute eczema from contact#

Umbellularia californica [Oregon myrtle]-- irritation of mucous membranes of some who handle[#]

upas tree, see: Antiaris toxicaria

Urechites lutea & U. pinetorum [wild allamanda]-- milky sap causes severe skin inflammation & blistering*

Urera spp.-- stinging hairs[#]

Urtica chamaedryoides [field nettle]-- urticating hairs cause intense itching and reddening of skin[#]

Urtica urens [stinging nettle]-- urticating hairs cause itching, in very sensitive swelling & burning*#

urticant= a substance which causes itching or stinging [dictionary]

urticaria= a skin condition with itching welts caused by allergic reactions [dictionary]

V

Valeriana officinalis [all-heal]-- irritant#

velvetleaf, see: Kalanchoe beharensis

Vanilla planifolia [vanilla orchid]-- skin irritation to some*

Veratrum spp.-- irritant[#]

Verbascum thaspus [mullein, flannel plant]-- wooly hairs irritant[#]

Verbena venosa-- contact dermatitis[#]

Verbesina encelioides [golden crownbeard]-- contact dermatitis[#]

viper's bugloss, see: Echium vulgare

Virginia creeper, see: Parthenocissus quinquefolia

virgin's bower, see: *Clematis* spp.

Vitex trifolia [chaste tree]-- asthma-like respiratory irritation when trimming*#

Vitis vinifera [table grape or wine grape]-- rarely, dermatitis#

voodoo-lily, see: Sauromatum venosum

W

wafer ash, see: Ptelea

water lettuce, see: Pistia stratiotes water parsnip, see: Sium latifolium

water pepper, see: Polygonum

water plantain, see: Alisma

whalebone tree, see: *Streblus brunoniana* white-cinnamon, see: *Canella winterana*

Wigandia caracasana [ortiga]-- stinging hairs#

Wilcstromia spp.-- sap irritant and caustic#

wintersweet, see: Acokanthera

wind-flower, see: Anemone caroliniana

wireweed, see: *Polygonum* wolf s bane, see: *Arnica* wood nettle, see: *Laportea*

wooly croton, see: Croton capitatus

 \mathbf{X}

Xanthium spp. [cockleburs]-- contact dermatitis#

Xanthosoma sagittifolium [elephant's ear]-- sap may cause dermatitis to sensitive skin & eye irritation*

 \mathbf{Y}

yam, white, see: *Dioscorea alata* yarrow, see: *Achillea millefolium* yaw root, see: *Stillingia sylvatica*

yellow allamanda, see: *Allamanda cathartica* yellow oleander, see: *Thevetia peruvian*a

ylang-ylang tree, see: Cananga odorata

 \mathbf{Z}

Zanthedeschia spp. [arum lily, calla lily]-- sap may cause dermatitis to sensitive skin & eye irritation*#

Zanthoxylum spp. [toothache trees]-- dermatitis#

Zea mays [corn]-- compickers may develop rash#

Zingiber officinalis [ginger]-- rhizomes give slight contact sensitivity#

Zinnia spp.-- possible dermatitis#