



Plant Listings

The following information is from the Harmful & Edible Plants section of my website.

Introduction

If you have not read through the information on this page before, please take the time to do so. While you may not need all this information right now, at least you will know where to find it in the future.

Why you need to be concerned about plants

Many people believe that all animals know what is and is not safe to eat. This is a serious - and potentially fatal - mistake when you are talking about an animal who has been removed from its native habitat.

An animal in its native environment knows what it can and cannot eat. If it makes a mistake and becomes ill, it will not eat that plant again. If it eats a plant that kills it, well, it clearly won't be eating it again! The fact that the leading cause of death of herbivores and omnivores in the wild is not from eating toxic plants indicates that animals either learn their lessons well by observing older conspecifics or by being born or hatched with a sort of genetic field guide to edible plants.

Once you remove an animal from its environment, however, that field guide and learned avoidance becomes useless. Instead, the animal will pretty much try to eat anything that resembles what it is programmed (learned or instinct) to eat. Hence, toxic plants such as azaleas and oleanders look like a terrific snack for a hungry or curious iguana or tortoise.

If you are thinking about furnishing a tank with plants, or are considering letting any of your herbivores or omnivores free-roam in your house or in an outdoor enclosure, you need to assure that the plants in those areas are not toxic.

The toxic chemicals of plants are passed to an animal in one of two ways - by ingestion of plant material or by superficial physical contact with a plant or certain parts of the plant. If anyone has ever had poison oak or ivy, they are quite familiar with this latter method of transmission. Some plants are completely toxic; others have only certain parts that are toxic, such as the leaves, or flowers, or roots/rhizomes, or seeds. Some plants contain toxins strong enough to kill the animal, others will make them seriously ill and may lead to death. Others may just make them wish they were dead. With other plants, the toxic effect may depend on how much is ingested, the size of the animal ingesting it, and/or it's relative health or what else it has eaten that day.

Some plants can cause injury in other ways, such as lacerating or puncturing the body, eyes, mouth, etc. They may cause ulcers, lesions and abscesses on the skin, and intestinal impaction from indigestible plant parts. Kale, for example, has very hard ribs and veins that, when torn and offered still attached to the leafy matter, may scratch or puncture a lizard or tortoise's throat or esophagus as, rather than chewing their food, most herbivorous and omnivorous reptiles just tear or rip and swallow their food. Another example is thorns on cactus and other plants that are placed in an enclosure, or an impaction of fig seeds in a hatchling's gut.

Plant Chemical Interactions

Many plants contain chemical or chemical compounds (phytates) that can interfere with the body's ability to metabolize certain nutrients. In some instances, if a plant contains small relatively amounts of certain of these chemicals, then most animals may be able to eat them so long as they do not ingest too much of the chemicals relative to the complete diet. Some plants may contain the same chemicals but in such high quantities that death may occur within a matter of hours. Other plants contain chemicals that are always lethal.

Examples of plants with nonlethal but nonetheless potentially harmful chemicals include bok choy, broccoli, Brussels sprouts, cabbage, and soy, which contain goitrogenic compounds. These chemicals bind iodine, preventing its uptake, thus leading to impairment of thyroid gland function, which in turn leads to a host of metabolic problems. Spinach, parsley, carrots, and chards contain calcium oxalate, which interferes with calcium uptake; when fed as a significant portion of the overall diet, they cause the mineralization (hardening, crystallization) of organs and muscle tissue and can bind enough calcium to cause a form of metabolic bone disease.

Some of the plants that appear on lists of foods recommended for your reptile are also on the Harmful and Toxic Plants listing. Does this mean you should stop feeding them? No. It does mean that you need to make sure to alternate these plants with others known to be safely edible to ensure that your reptile is not getting significant amounts of the problematic phytates. Some may be okay for occasional treats, such as bok choy or a little bit of soy. A couple of leaves of spinach now and then won't hurt, either. But feeding these foods on a regular basis (say, no more than a small amount a couple times a month or every other month) will be safe and provide some variety in the diet.

Does this mean that you can then feed, or not worry about, your reptile eating other plants on this list? No. While an iguana may get away with eating a bite or two of poinsettia, it won't get away with eating a similar amount of azalea. The rule of thumb I follow is: if it isn't on a recommended food list I trust, I will not be feeding it, nor will I allow my reptiles access to it. Those of us with part- or full-time free roamers face special problems. No matter how closely we watch our reptiles when they are out, we can't watch them 24 hours a day, seven days a week. Your iguana may ignore that English ivy or creeping charlie or rubber plant for years, but that doesn't mean that some day, when he is feeling a bit bored, or peckish, or is just ticked off at you for going away on vacation, he won't try a leaf or two. And that may be all it takes for you to end up with one less iguana.

I used to have some bonsai I was working on, as well as some pots of pothos and wandering jew. Well, despite the fact that the wandering jew (*Zebrina* spp. or *Tradescantia zebrina*) was a plant my iguanas could safely eat*, did they try to eat it? Of course not. They went for the pothos and the bonsais. The pothos were also safe to eat in small quantities, but not the species I was bonsai'ing. I finally realized that it was best if I didn't keep any plants in any room that was not closed off to the iguanas. Since they have the run of the house, that means no plants. Even closing a room off isn't a guarantee. Family and guests sometimes forget to close doors, and I know at least one person whose iguana managed to get, unnoticed, into a "closed" room and ingest part of a poinsettia before being discovered.

*It should be noted that some *Tradescantia* sp. appear on toxic lists, others on edible lists. In the UC Davis toxic list, which lists common name Wandering Jew for *Tradescantia* sp., they have the notation that this plant may cause dermatitis from coming into contact with it. The Plants for a Future Database, which lists many plants useful for food, fiber, shelter, and medicinal uses,

lists only one of the Tradescantia species with edible leaves and flowers, the Tradescantia virginiana (Virginia spiderwort), which has several other synonyms for its scientific name (T. virginica, T. virginica, Ephemeron congestum, T. brevicaulis, T. congesta; T. rupestris, T. speciosa, T. virginiana var. alba, T. virginiana var. barbata). What this means is that you should check several sources and then make the best decision you can as to whether you will put the plant in an area accessible to your reptiles (or human children). It also points out why writing me in frustration asking me for a definitive answer because you can't find a definitive answer to a plant that isn't as out-right toxic as oleander or azalea won't accomplish anything but frustrate us both. So, when in doubt, leave it out.

Harmful Plants

The most extensive list of poisonous plants that I have found is in Sue Barnard's book Reptile Keeper's Handbook (Barnard, S. M. (1996.) Reptile Keeper's Handbook. Krieger Publishing Company, Kreiger Drive, Malabar, FL. pp. 167-184. ISBN 089464-933-7). Permission to reprint the plant appendixes has been graciously provided to me by Sue Barnard and Krieger Publishing.

After ingestion...

If your reptile does ingest something it should not have, watch it carefully for signs of distress. Signs will include respiratory changes (rate of breathing increases or decreases, breaths become shallower or deeper, breathing becomes labored or difficult), increased salivation, dry heaves, vomiting, lethargy, increased activity, rubbing mouth on ground or other surfaces, scratching at face or mouth, diarrhea or other alteration of feces. Don't wait to see if the signs will abate - call (or have someone call) your regular reptile vet or emergency reptile vet (have these numbers and locations on hand before you need them) and let them know what the animal ate, what the signs are, and that you are on your way. Regular poison control hotlines may be useful, but their experience and expertise is mostly with humans, dogs and cats. The National Animal Poison Control Center may also be able to offer information, but in a potential emergency, time is of the essence and you should get your reptile to a vet who can institute antidote and supportive therapy as quickly as possible.

If there are no signs, continue to observe for 24-48 hours. You may wish to contact your vet the next business day even if there are still no signs in case there is anything she or he wants you do to.

Finding more plant information

Plant Identification

If you cannot identify plants from gardening and houseplant books, nor from field guides to wild plants, take cuttings or photos (clear color photos including close-ups of leaves and branches, as well as a distance shot showing the entire plant) to a plant nursery (a real nursery, not the plant section in the supermarket, Wal-Mart or Target, etc.) Check your public library's community organizations listing, or with the reference librarian him- or herself, for information on a local horticultural society and contact the society to find someone who can help you identify a plant. Needless to say, plant identification is something that should be done before exposing your pets to a plant, not after the plant has been ingested and you are trying to find out if it will kill your pet or not! See also the websites listed at the end of this document.

HARMFUL & POISONOUS PLANTS

Susan M. Barnard. Reptile Keeper's Handbook. pp. 167-184. 1996. Reprinted by permission of author and Krieger Publishing Company, Malabar, FL

A

Abrus precatorius (CRAB'S EYE, JEQUIRITY BEAN, PRECATORY BEAN, ROSARY PEA); seeds; gastrointestinal tract affected by toxalbumins.

Acacia spp. (CATCLAW, GUAJILLO); foliage; plant is cyanogenetic.

ACKEE (*Blighia sapida*); pink raphe attaching aril2 to seed, arils in immature fruit; gastrointestinal tract and nervous system affected by toxins.

Acokanthera spp. (BUSHMAN'S POISON, WINTERSWEET); seeds; cardiovascular system affected by cardiac glycosides.

ACONITE (*Aconitum* spp.); entire plant, esp. leaves and roots; cardiovascular system affected by alkaloid toxins.

Aconitum spp. (ACONITE, MONKSHOOD); entire plant, esp. leaves and roots; cardiovascular system affected by alkaloid toxins.

Actaea spp. (BANE BERRY, DOLL'S EYES); foliage, berries, roots; gastrointestinal tract and nervous system affected by the toxin protoanemonin.

Adenium spp. (DESERT ROSE, MOCK AZALEA); entire plant; cardiovascular system affected by digitalis-like glycosides.

Adonis spp. (PHEASANT'S EYE); entire plant; cardiovascular system affected by cardiac glycosides.

Aesculus spp. (BUCKEYES, HORSE CHESTNUT); nuts, immature growths; gastrointestinal tract affected by saponins.

Aethusa cynapium (FOOL'S PARSLEY, LESSER HEMLOCK); entire plant; gastrointestinal tract affected by alkaloid toxins.

Agave lecheguilla (LECHUGUILLA); plant is hepatogenic.

Agrostemma githago (CORNCOCKLE, PURPLECOCKLE); seeds; gastrointestinal tract affected by saponins.

Aleurites spp. (CANDLEBERRY, CANDLENUT, TUNG3 NUT, TUNG TREE); entire plant; gastrointestinal tract affected by saponins and toxalbumins.

Allamanda cathartica (ALLAMANDA, CANARIO, GOLDEN TRUMPET VINE, YELLOW ALLAMANDA); bark, leaves, fruit, seeds, sap; plant contains cathartic toxins; plant also causes dermatitis.

Allium spp. (CHIVES, GARLIC, LEEKS, ONIONS); bulbs, bulblets, flowers, stems; gastrointestinal tract affected by plant toxins.

Alocasia spp. (ELEPHANT'S EAR, TARO); leaves, stems; mouth irritated by plant raphides.

AMARANTH (*Amaranthus hybridus*); plant may contain toxic levels of nitrates.

Amaranthus hybridus (AMARANTH, CARELESS WEED, TUMBLEWEED); plant may contain toxic levels of nitrates.

Amaryllis spp. (AMARYLLIS, NAKED-LADY LILLY); bulbs; gastrointestinal tract affected by alkaloid toxins.

Amianthemum muscaetoxicum (FLY-POISON, STAGGERGRASS); leaves, underground parts of plant; alkaloid toxins may cause respiratory failure.

Ammi majus (BISHOP'S WEED); plant may contain toxic levels of nitrates.

Amsinckia intermedia (FIDDLENECK, TARWEED); seed-like nutlets; plant may contain toxic levels of nitrates.

Anemone spp. (includes *Pulsatilla* spp.) (ANEMONE, PASQUE FLOWER, WINDFLOWER); entire plant; gastrointestinal tract affected by the toxin protoanemonin; plant also causes dermatitis.

ANGEL TRUMPET TREE (*Brugmansia x candida*); entire plant, esp. seeds; nervous system affected by belladonna alkaloids; plant contains hallucinogens.

Aplopappus spp. (GOLDENRODS, JIMMY WEED, RAYLESS); leaves; plant may contain toxic levels of nitrates.

Apocynum spp. (DOGBANE, INDIAN HEMP, SPREADING DOGBANE); leaves; plant contains cardiac glycosides.

APPLES (*Malus* spp.); seeds; plant is cyanogenetic.

APRICOTS (*Prunus* spp.); seeds; plant is cyanogenetic.

Aquilegia vulgaris (COLUMBINE); entire plant; cardiovascular system affected by plant toxins.

Areca catechu (ARECA PALM, BETEL NUT); entire plant.

ARECA PALM (*Areca catechu*); entire plant.

Argemone spp. (MEXICAN POPPY, PRICKLY POPPY); entire plant; isoquinoline alkaloid causes "epidemic dropsy" in humans.

Arisaema spp. (GREEN DRAGON, INDIAN TURNIP, JACK-IN-THE-PULPIT); entire plant; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides; plant also causes dermatitis.

Arnica montana (ARNICA); rhizomes, flowers; gastrointestinal tract and cardiovascular system affected by plant toxins; plant also causes dermatitis.

ARROWGRASS (*Triglochim maritima*); leaves; plant is cyanogenetic.

Arum spp. (CUCKOO-PINT, ITALIAN ARUM, LORDS & LADIES); entire plant; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides; plant also causes dermatitis.

Asclepias spp. (MILKWEEDS, WHORLED BUTTERFLY); leaves, stems; plant contains toxic resins.
Astragalus (LOCOWEEDS, POISON-VETCHES); entire plant; plant may absorb toxic levels of selenium.

Atropa belladonna (BELLADONNA, DEADLY NIGHTSHADE); entire plant; nervous system affected by the alkaloids jasciamine, atropine, and belladonnin.

AUTUMN CROCUS (*Colchicum autumnale*, other *Colchicum* spp.); entire plant; gastrointestinal tract affected by the toxin colchicine and other alkaloids; plant also causes dermatitis.

Avena sativa (OATS); plant is nontoxic unless contaminated with smut or fungi.

AZALEAS (*Rhododendron* spp.); leaves, nectar; cardiovascular system affected by the resinoid andromedotoxin.

B

BAGPOD (*Sesbania* spp.); seeds; gastrointestinal tract affected by saponins.

Bahia oppositifolia (BAHIA); entire plant; plant is cyanogenetic.

BALSAM APPLE (*Momordica balsamina*); outer rind of ripe fruit, seeds; gastrointestinal tract affected by toxalbumins.

BALSAM PEAR (*Momordica charantia*); outer rind of ripe fruit, seeds; gastrointestinal tract affected by toxalbumins.

BANEBERRY (*Actaea* spp.); berries, roots; gastrointestinal tract and nervous system affected by the toxin protoanemonin.

BARILLA (*Halogeton glomeratus*); leaves, stems; plant contains soluble oxalates.

BARNYARD GRASS (*Echinochloa crusgalli*); plant may contain toxic levels of nitrates.

BEAD TREE (*Melia azedarach*); fruit, bark; plant contains convulsants.

BEGGAR-TICK (*Bidens frondosa*); plant may contain toxic levels of nitrates.

BELLADONNA (*Atropa belladonna*); entire plant; nervous system affected by the alkaloids jasciamine, atropine, and belladonnin.

BELLYACHE BUSH (*Jatropha gossypifolia*); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils; plant also causes dermatitis.

BERMUDA BUTTERCUP, BERMUDA OXALIS (*Oxalis pes-caprae*); leaves; plant contains soluble oxalates.

Beta vulgaris (MANGOLD, SUGAR BEET); leaves; plant contains soluble oxalates and may contain toxic levels of nitrates.

Bidens frondosa (BEGGAR-TICK); plant may contain toxic levels of nitrates.

BINDWEED (*Ipomea* spp.); entire plant; plant contains LSD-related hallucinogens and may contain toxic levels of nitrates.

BIRD-OF-PARADISE (*Caesalpinia gilliesii*); seeds; gastrointestinal tract affected by plant toxins.

BIRDSFOOT TREFOIL (*Lotus corniculatus*); entire plant; plant is cyanogenetic.

BISHOP'S WEED (*Ammi majus*); plant may contain toxic levels of nitrates.

BITTER GOURD (*Momordica charantia*); outer rind of ripe fruit, seeds; gastrointestinal tract affected by toxalbumins.

BITTERSWEET (*Celastrus scandens*; do not confuse with *Solanum dulcamara*); entire plant; plant is reputed to be toxic.

BITTERWEED (*Helenium spp.*); plant causes dermatitis.

BLACK BRUSH (*Flourensia cernua*); fruit; gastrointestinal tract affected by plant toxins.

BLACK BRYONY (*Tamus communis*); toxic principles similar to *Bryonia dioica*.

BLACK LOCUST (*Robinia pseudoacacia*); bark, seeds, leaves; gastrointestinal tract affected by toxalbumins.

BLACK NIGHTSHADE (*Solanum nigrum*); leaves, berries; gastrointestinal tract affected by solanin glycoalkaloids; plant also causes dermatitis.

BLEEDING HEART (*Dicentra formosa*); entire plant, esp. bulbs; plant contains convulsants including isoquinoline; plant also causes dermatitis.

Blighia sapida (ACKEE); pink raphe¹ attaching aril² to seed, arils in immature fruit; toxins affect gastrointestinal tract and nervous system.

BLOODROOT (*Sanguinaria canadensis*); juices from stems and rootstocks cause dermatitis.

BLUEBONNETS (*Litpinus subcarnosus*); leaves, esp. seeds; plant contains numerous alkaloid toxins including quinolizidine and piperidine.

BLUE RUSH (*Juncus inflexus*); plant causes convulsions in cattle.

BLUE TARO (*Xanthosoma spp.*); leaves; mouth irritated by plant raphides; plant also causes dermatitis.

BOUNCING BET (*Saponaria officinalis*); seeds; gastrointestinal tract affected by saponins.

BOX, BOXWOOD (*Buxus sempervirens*); entire plant; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

BRACKEN FERN, BRAKE FERN (*Pteridium sp.*); fronds; plant contains thiaminase.

Brassica spp. (CABBAGE, KALE, MUSTARD); leaves; plant is goitrogenic; may contain toxic levels of nitrates; *B. napus* (CULTIVATED RAPE) is hepatogenic.

Bromus spp. (RESCUE GRASS, SMOOTH BROMEGRASS); plant may contain toxic levels of nitrates.

BROOMCORN (*Sorghum sp.*); leaves; plant is cyanogenetic.

Brugmansia x candida (ANGEL TRUMPET TREE); entire plant, esp. seeds; nervous system affected by belladonna alkaloids; plant contains hallucinogens.

Bryonia dioica (DEVIL'S TURNIP, WHITE BRYONY); gastrointestinal tract affected by the glycosides bryonin and bryonidin; plant also causes dermatitis.

BUCKEYES (*Aesculus spp.*); nuts, immature growths; gastrointestinal tract affected by saponins.

BUCKTHORN (*Karwinskia humboldtiana* - do not confuse with the mildly toxic *Rhamnus* spp.); fruit; toxins affect nervous system.

BUCKWHEAT (*Fagopyrum esculentum*); plant causes photosensitization and contact dermatitis.

BUFFALO BUR (*Solanum* sp.); immature growths; gastrointestinal tract affected by solanine glycoalkaloids; plant may contain toxic levels of nitrates; also causes dermatitis.

BULL NETTLE (*Solanum* sp.); immature growths; gastrointestinal tract affected by solanine glycoalkaloids; plant may contain toxic levels of nitrates; also causes dermatitis.

BUNCH-GRASS (*Nolina texana*); foliage; hepatogenic.

BUR CLOVER (*Medicago denticulata*); plant causes photosensitization.

BURNING BUSH (*Euonymus* spp.); fruit; cardiovascular system affected by the glycosides evobioside, evomonoside, and evonoside.

BUSHMAN'S POISON (*Acokanthera* spp.); seeds; cardiovascular system affected by cardiac glycosides.

BUTTERCUPS (*Ranunculus* spp.); sap; toxin, protoanemonin, affects gastrointestinal tract and nervous system; plant also causes dermatitis.

BUTTONBUSH (*Cephalanthus occidentalis*); entire plant, esp. leaves.

Buxus sempervirens (BOX, BOXWOOD); entire plant; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

C

CABBAGE (*Brassica* sp.); leaves; plant is goitrogenic.

CACTI (numerous genera); certain species are toxic.

Caesalpinia gilliesii (BIRD-OF-PARADISE); seeds; gastrointestinal tract affected by plant toxins.

Caladium spp. (CALADIUM, also see *Xanthosoma* spp.); leaves; mouth irritated by plant raphides.

CALEY PEA (*Lathyrus* spp.); stems, seeds; nervous system affected by plant toxins.

CALICO BUSH (*Kalmia* sp.); leaves, nectar; gastrointestinal tract, cardiovascular and nervous systems affected by the toxins andromedotoxin and arbutin.

CALIFORNIA CHICORY (*Rafinesquia californica*): plant may contain toxic levels of nitrates.

CALLA LILY (*Zantedeschia aethiopica*); leaves; mouth irritated by plant raphides.

Calotropis spp. (CROWN FLOWER); entire plant; cardiovascular system affected by cardiac glycosides.

Caltha palustris (COWSLIP, MARSH MARIGOLD); entire plant; gastrointestinal tract affected by the toxin protoanemonin; plant also causes dermatitis.

CALTROP (*Tribulus terrestris*); plant may contain toxic levels of nitrates; plant is also hepatogenic.

CALYCANTH (*Calycanffius* spp.); seeds; cardiovascular and nervous systems affected by plant toxins.

Calycanthus spp. (CALYCANTH, CAROLINA ALLSPICE); seeds; cardiovascular and nervous systems affected by plant toxins.

Campsis spp. (TRUMPET VINE); plant causes dermatitis.

CANADA THISTLE (*Cirsium arvense*); plant may contain toxic levels of nitrates.

CANARIO (*Allamanda cathartica*); bark, leaves, fruit, seeds, sap; plant contains cathartic toxins; plant also causes dermatitis.

CANDLEBERRY, CANDLENUT (*Aleurites molluccana*); entire plant; gastrointestinal tract affected by saponins and toxalbumins.

Cannabis sativa (MARIJUANA); leaves, flower bracts; plant contains the hallucinogens tetrahydrocannabinols.

CARDINAL FLOWER (*Lobelia* spp.); leaves, stems, fruit; nervous system affected by the toxin pyridine; plant also causes dermatitis.

Carduus sp. (PLUMELESS THISTLE); plant may contain toxic levels of nitrates.

CARELESS WEED (*Amaranthus hybridus*); plant may contain toxic levels of nitrates.

CAROLINA ALLSPICE (*Calycanthus* spp.); seeds; cardiovascular and nervous systems affected by plant toxins.

CASSAVA (*Manihot esculenta*); leaves, esp. roots; plant is cyanogenetic.

Cassia spp. (COFFEE SENNA, GOLDEN SHOWER, INDIGO, SENNA, SICKLE POD); entire plant; gastrointestinal tract affected by toxalbumins.

CASTOR BEAN (*Ricinus communis*); seeds; gastrointestinal tract affected by toxalbumins; plant also causes dermatitis.

CATCLAW (*Acacia greggi*); foliage, plant is cyanogenetic.

CELANDINE, CELANDINE POPPY (*Chelidonium majus*); entire plant; nervous system affected by the alkaloids chelidone, chelerythrine, and protopine; plant also causes dermatitis.

Celastrus scandens (BITTERSWEET); entire plant; plant is reputed to be toxic.

Cephalanthus occidentalis (BUTTONBUSH); entire plant, esp. leaves; plant is reputed to be toxic.

Cercocarpus montanus (MOUNTAIN-MAHOGANY); wilted leaves; plant is cyanogenetic.

Cestrum spp. (DAY-BLOOMING JESSAMINE, JASMINE, NIGHT-BLOOMING JESSAMINE); fruit, sap; gastrointestinal tract affected by solanine glycoalkaloids; nervous system affected by atropine-like toxins.

CHEESEWEED (*Malva parviflora*); plant may contain toxic levels of nitrates.

Chelidonium majus (CELANDINE, CELANDINE POPPY); entire plant; nervous system affected by the alkaloids chelidone, chelerythrine, and protopine; plant also causes dermatitis.

Chenopodium spp. (GOOSEFOOT, LAMB'S QUARTERS, PIGWEED, WORMSEED); plant may contain toxic levels of nitrates.

CHERRIES (*Prunus* spp.); kernels in pits; plant is cyanogenetic.

CHERRY LAUREL (*Prunus* sp.); entire plant; plant is cyanogenetic.

CHICKWEED (*Stellaria media*); plant may contain toxic levels of nitrates.

CHINABERRY TREE (*Melia azedarach*); fruit, bark; plant contains convulsants.

CHINESE LANTERN (*Physalis* spp.); unripe berries; gastrointestinal tract affected by solanine glycoalkaloids.

CHIVES (*Allium* spp.); bulbs, bulblets, flowers, stems; toxins affect gastrointestinal tract; plant also causes dermatitis.

CHRISTMAS-BERRY (*Heteromeles arbutifolia*); leaves; plant is cyanogenetic.

CHRISTMAS ROSE (*Helleborus niger*); entire plant; cardiovascular system affected by the cardiac glycosides helleborin and helleborein; plant also causes dermatitis.

Cicuta spp. (WATER HEMLOCK); entire plant, esp. roots; nervous system affected by the convulsant cicutoxin.

Cirsium arvense (CANADA THISTLE); plant may contain toxic levels of nitrates.

Claviceps spp. (ERGOT); an ascomycetous fungus which grows on small grain (e.g., rye); also contains the alkaloid indole.

Clematis spp. (CLEMATIS, TRAVELLER'S JOY, VIRGIN'S BOWER); entire plant; gastrointestinal tract and nervous system affected by plant toxins; plant also causes dermatitis.

Cleome serrulata (ROCKY MT. BEE PLANT); plant may contain toxic levels of nitrates.

CLIMBING LILY (*Gloriosa* spp.); entire plant, esp. tubers; gastrointestinal tract affected by the toxin colchicine.

CLOVERS (*Trifolium* spp.); plant causes photosensitization and contact dermatitis (also see WHITE CLOVER).

COAL-OIL BRUSH (*Teradyimia glabrata*); leaves; plant is hepatogenic.

COAST GOLDENBUSH (*Haplopappus venetus*); plant may contain toxic levels of nitrates.

COCKLEBUR (*Xanthium orientate*); leaves at sprouted two-leaf stage, germinating seeds; plant contains hydroquinone; also causes dermatitis.

COFFEE SENNA (*Cassia occidentalis*); entire plant; gastrointestinal tract affected by toxalbumins.

COFFEEWEED (*Sesbania* spp.); seeds; gastrointestinal tract affected by saponins.

Colchicum autumnale (AUTUMN CROCUS, MEADOW SAFFRON); entire plant; gastrointestinal tract affected by the toxin colchicine and other alkaloids; plant also causes dermatitis.

Colocasia esculenta (ELEPHANT'S EAR, TARO); leaves; mouth irritated by plant raphides.

COLUMBINE (*Aquilegia vulgaris*); entire plant; cardiovascular system affected by plant toxins.

COMMON LANTANA (*Lantana camara*); immature berries; nervous system affected by the atropine-like toxin lantodene; plant is also hepatogenic.

COMMON PRIVET (*Ligustrum vulgare*); entire plant; gastrointestinal tract affected by the glycoside ligustrin.

COMMON VETCH (*Vicia sativa*); seeds, moldy parts; plant is cyanogenetic; plant also causes photosensitization.

Conium maculatum (HEMLOCK, POISON HEMLOCK); entire plant, esp. roots and seeds; nervous system affected by alkaloids including coniine, coniceine, and conidine; may contain toxic levels of nitrates; plant also causes dermatitis.

Convallaria majalis (LILY-OF-THE-VALLEY); entire plant; cardiovascular system affected by the glycosides convallarin and convallamarin.

COONTIE (*Zamia pumila*); roots, trunk; gastrointestinal tract and nervous system affected by plant toxins.

COPPERWEED (*Oxytenia acerosa*); leaves; toxic principle unknown.

CORAL PLANT (*Jatropha multifida*); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils; plant also causes dermatitis.

Coriaria myrtifolia (no trivial name in U.S.); fruit; plant contains convulsants.

CORNCOCKLE (*Agrostemma githago*); seeds; gastrointestinal tract affected by saponins.

Corydalis spp. (FITWEED); entire plant; plant contains convulsants including isoquinoline.

Corynocarpus laevigatus (no trivial [common] name in U.S.);fruit; plant contains convulsants.

COWCOCKLE (*Saponaria vaccaria*); seeds; gastrointestinal tract affected by saponins.

COWSLIP (*Caltha palustris*); entire plant; gastrointestinal tract affected by the toxin protoanemonin; plant also causes dermatitis.

COYOTILLO (*Karwinskia humboldtiana*); fruit; nervous system affected by plant toxins.

CRAB'S EYE (*Abrus precatorius*); seeds; gastrointestinal tract affected by toxalbumins.

CREEPING CHARLIE (*Glechoma hederacea*); plant contains a variety of volatile oils.

Crotalaria spp. (RATTLEBOX); entire plant; pyrrolizidine alkaloids cause hepatic veno-occlusive disease (Budd-Chiari syndrome) in humans.

CROWFOOTS (*Ranunculus* spp.); gastrointestinal tract and nervous system affected by the toxin protoanemonin; plant also causes dermatitis.

CROWNBEARD (*Verbesina encelioides*); plant may contain toxic levels of nitrates.

CROWN FLOWERS (*Calotropis* spp.) entire plant; cardiovascular system affected by cardiac glycosides.

Cryptostegia spp. (RUBBER VINE, PURPLE ALLAMANDA); entire plant; cardiovascular system affected by digitalis-like glycoside.

CUCKOO-PINT (*Arum maculatum*); entire plant; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides; plant also causes dermatitis.

CULTIVATED RAPE (*Brassica napus*); plant is hepatogenic.

CURCAS BEAN (*Jatropha curcas*); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils; plant also causes dermatitis.

Cypripedium spp. (LADY SLIPPER, MOCCASIN FLOWER, SHOWY LADY SLIPPER, YELLOW LADY SLIPPER); plant causes dermatitis.

Cytisus scoparius (SCOTCH BROOM); seeds; plant contains quinolizidine alkaloid toxins.

D

DAFFODIL (*Narcissus* spp.); bulbs; gastrointestinal tract affected by alkaloid toxins; plant also causes dermatitis.

Daphne spp. (DAPHNE, MEZEREON, SPURGE LAUREL, WOOD LAUREL); entire plant, esp. fruit and seeds; gastrointestinal tract and kidneys affected by coumarin glycosides; plant also causes dermatitis.

Datura stramonium (DEVIL'S TRUMPET, JIMSON WEED, THORNAPPLE); entire plant; nervous system affected by the alkaloids atropine, scopolamine, and hyoscyamine; may contain toxic levels of nitrates; plant also causes dermatitis.

DAY-BLOOMING JESSAMINE (*Cestrum diurnum*); fruit, sap; gastrointestinal tract affected by solanine glycoalkaloids; nervous system affected by atropine-like toxins.

DEADLY NIGHTSHADE (*Atropa belladonna*); entire plant; nervous system affected by the alkaloids jasciamine, atropine, and belladonnin.

DEATH CAMAS (*Zigadenus* spp.); entire plant; cardiovascular system affected by alkaloid toxins.

Delphinium spp. (LARKSPUR); cardiovascular system affected by alkaloids including delphinine; plant also causes dermatitis.

DESERT ROSE (*Adenium* spp.); entire plant; cardiovascular system affected by digitalis-like glycosides.

DEVIL'S CLUB (*Echinopanax horridum*); plant causes dermatitis.

DEVIL'S TRUMPET (*Datura stramonium*); entire plant; nervous system affected by the alkaloids atropine, scopolamine, and hyoscyamine; may contain toxic levels of nitrates; plant also causes dermatitis.

DEVIL'S TURNIP (*Bryonia dioica*); gastrointestinal tract affected by the glycosides bryonin and bryonidin; plant also causes dermatitis.

Dicentra spp. (BLEEDING HEART, DUTCHMAN'S BREECHES, GOLDEN EAR-DROPS, SQUIRREL CORN, STAGGER WEED, STEER'S HEAD); entire plant, esp. bulbs; plant contains convulsants including isoquinoline; plant also causes dermatitis.

Dieffenbachia spp. (DUMBCANE); leaves; mouth irritated by plant raphides; plant also causes dermatitis.

Digitalis purpurea (FOXGLOVE, PURPLE FOXGLOVE); entire plant; cardiovascular system affected by the glycosides digitalin and digitoxin; gastrointestinal tract affected by saponins.

Dionaea sp. (VENUS FLYTRAP); entire plant.

DOCKS (*Rumex* spp.); leaves; plant contains soluble oxalates and may contain toxic levels of nitrates: plant also causes dermatitis.

DOGBANE (*Apocynum cannabinum*); plant contains cardiac glycosides.

DOG HOBBLE (*Leucothoe* spp.); leaves, nectar; cardiovascular and nervous systems affected by plant toxins.

DOLL'S EYES (*Actaea* spp.); foliage, berries, roots; gastrointestinal tract and nervous system affected by the toxin protoanemonin.

DUMBCANE (*Dieffenbachia* spp.); leaves; mouth irritated by plant raphides; plant also causes dermatitis.

DUTCHMAN'S BREECHES (*Dicentra cucullaria*); entire plant, esp. bulbs; plant contains convulsants including isoquinoline; plant also causes dermatitis.

E

EAGLE FERN (*Pteridium* sp.); fronds; plant contains thiaminase.

Echinochloa crusgalli (BARNYARD GRASS); plant may contain toxic levels of nitrates.

Echinopanax horridum (DEVIL'S CLUB); plant causes dermatitis.

Echium vulgare (VIPER'S BUGLOSS); entire plant; pyrrolizidine alkaloid causes hepatic veno-occlusive disease (Budd-Chiari syndrome) in humans.

ELDERBERRY (*Sambucus* spp.); entire plant; plant is cyanogenetic and may contain toxic levels of nitrates.

ELEPHANT'S EAR (*Alocasia* sp., *Colocasia esculenta*); leaves, stems; mouth irritated by plant raphides.

ENGLISH IVY (*Hedera helix*); berries, leaves; gastrointestinal tract affected by saponins; plant also causes dermatitis.

Equisetum spp. (FOXTAILS, HORSETAILS, SCOURING RUSH); stems; toxic principles uncertain; fungus growing on plant may cause toxicity.

ERGOT (*Claviceps* spp.); an ascomycetous fungus which grows on small grain (e.g., rye); also contains the alkaloid indole.

Eriobotrya japonica (LOQUAT, JAPAN PLUM); kernel in pit; plant is cyanogenetic.

Euonymus spp. (BURNING BUSH, SPINDLE TREE, STRAWBERRY BUSH, WAHOO); fruit; cardiovascular system affected by the glycosides evobioside, evomonoside, and evonoside.

Eupatorium spp. (JOE-PYE WEED, THOROUGHWORT, WHITE SNAKEROOT); leaves; plant may contain toxic levels of nitrates.

Euphorbia spp. (EUPHORBIA, MILK BUSH, POINSETTIA, SNOW-ON-THE-MOUNTAIN, SPURGES); latex; gastrointestinal tract affected by the toxin euphorbin; may contain toxic levels of nitrates; plant also causes dermatitis.

EUROPEAN BEECH (*Fagus sylvatica*); seeds; gastrointestinal tract affected by saponins.

EUROPEAN MISTLETOE (*Viscum album*); leaves, stems; gastrointestinal tract affected by toxalbumins.

F

Fagopyrum spp. (BUCKWHEAT, INDIA WHEAT); plant causes photosensitization and contact dermatitis.

Fagus sylvatica (EUROPEAN BEECH); seeds; gastrointestinal tract affected by saponins.

FALSE HELLEBORE (*Veratrum* spp.); entire plant; cardiovascular system affected by alkaloid toxins; plant also causes dermatitis.

FALSE JESSAMINE (*Gelsemium sempervirens*); leaves, roots; plant contains convulsants including indole; plant also causes dermatitis.

FALSE SAGO PALM (*Zamia pumila*); trunk, roots; gastrointestinal tract and nervous system affected by plant toxins.

FANWEED (*Thlaspi arvensi*); seeds; gastrointestinal tract affected by mustard oil.

FESCUE, TALL (*Festuca arundinacea*); considered nontoxic unless contaminated with ERGOT (*Claviceps* sp.) or other fungi.

Festuca arundinacea (FESCUE, TALL); considered nontoxic unless contaminated with ERGOT (*Claviceps* sp.) or other fungi.

FETTERBUSH (*Pieris* spp.); leaves, nectar; cardiovascular and nervous systems affected by plant toxins.

FIDDLENECK (*Amsinckia intermedia*); seed-like nutlets; plant may contain toxic levels of nitrates.

FIREBALL (*Kochia scoparia*); plant may contain toxic levels of nitrates.

FITWEED (*Corydalis* spp.); entire plant; plant contains convulsants including isoquinoline.

FLAG (*Iris* spp.); rootstocks; toxins affect gastrointestinal tract; plant also causes dermatitis.

FLAX (*Linum usitatissimum*); entire plant, esp. immature seed pods; plant is cyanogenetic and goitrogenic; may contain toxic levels of nitrates.

Florensia cernua (BLACK BRUSH, TARBUSH); fruit; gastrointestinal tract affected by plant toxins.

Florestina tripteris (FLORESTINA); entire plant; plant is cyanogenetic.

FLORIDA ARROWROOT (*Zamia pumila*); trunk, roots; gastrointestinal tract and nervous system affected by plant toxins.

FLY-POISON (*Amianthemum muscaetoxicum*); leaves, underground parts of plant; alkaloids cause respiratory failure.

FOOL'S PARSLEY (*Aethusa cynapium*); entire plant; gastrointestinal tract affected by alkaloid toxins.

FOUR O'CLOCK (*Mirabilis* sp.); entire plant; gastrointestinal tract affected by the alkaloid trigonelline.

FOWL MANNAGRASS (*Glyceria striate*); entire plant; plant is cyanogenetic.

FOXGLOVE (*Digitalis purpurea*); entire plant; cardiovascular system affected by the glycosides digitalin and digitoxin; gastrointestinal tract affected by saponins.

FOXTAILS (*Equisetum* spp.); stems; toxic principles uncertain; fungus growing on plant may cause toxicity.

FRIJOLITO (*Sophora secundiflora*); seeds; nervous system affected by nicotine-like, quinolizidine alkaloids.

Fritillaria meleagris (SNAKE'S HEAD BULB); cardiovascular system affected by alkaloid toxins.

G

Galanthus nivalis (SNOWDROP); gastrointestinal tract affected by the alkaloids lycorine and galantamine.

GARLIC (*Allium* spp.); bulbs, bulblets, flowers, stems; gastrointestinal tract affected by plant toxins.

Gelsemium sempervirens (FALSE JESSAMINE, YELLOW JESSAMINE); flowers, leaves, roots; plant contains convulsants including indole; plant also causes dermatitis.

GILL-OVER-THE-GROUND (*Glechoma hederacea*); plant contains a variety of volatile oils.

Glechoma hederacea (CREEPING CHARLIE, GILLOVER-THE-GROUND, GROUND IVY); plant contains a variety of volatile oils.

Gloriosa spp. (CLIMBING LILY, GLORIOSA LILY, GLORY LILY); entire plant, esp. tubers; gastrointestinal tract affected by the toxin colchicine.

GLORY LILY (*Gloriosa* spp.); entire plant, esp. tubers; gastrointestinal tract affected by the toxin colchicine.

Glyceria striata (FOWL MANNAGRASS); entire plant; plant is cyanogenetic.

Glycine max (SOYBEAN); plant is goitrogenic and may contain toxic levels of nitrates.

GOATHEAD (*Tribulus terrestris*); plant is hepatogenic and may contain toxic levels of nitrates.

GOAT WEED (*Hypericum perforatum*); entire plant; plant causes photosensitization and contact dermatitis.

GOLDENCHAIN TREE (*Laburnum x watereri*); entire plant, esp. seeds; nervous system affected by the alkaloid cytisine.

GOLDEN EAR-DROPS (*Dicentra chrysantha*); entire plant, esp. bulbs; plant contains convulsants including isoquinoline; plant also causes dermatitis.

GOLDENRODS (*Aplopappus* spp.); leaves; plant may contain toxic levels of nitrates.

GOLDEN SHOWER (*Cassia fistula*); pulp of pods, leaves, bark; plant contains cathartic toxins.

GOLDEN TRUMPET VINE (*Allamanda cathartica*); bark, leaves, fruit, seeds, sap; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

GOLDENWEEDS (*Oenopsis* spp.); entire plant; plant may absorb toxic levels of selenium.

GOOSEFOOT (*Chenopodium glaucum*); plant may contain toxic levels of nitrates.

GOOSEGRASS (*Triglochin maritima*); leaves; plant is cyanogenetic.

GOUT STALK (*Jatropha podagrica*); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils; plant also causes dermatitis.

GREASEWOOD (*Sarcobatus vermiculatus*); plant contains soluble oxalates; also causes dermatitis.

GREEN DRAGON (*Arisaema dracontium*); entire plant; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides; plant also causes dermatitis.

GROUND CHERRY (*Physalis* spp.); unripe berries; gastrointestinal tract affected by solanine glycoalkaloids.

GROUND IVY (*Glechoma hederacea*); plant contains a variety of volatile oils.

GROUNDSEL (*Senecio* spp.); entire plant; pyrrolizidine alkaloid causes hepatic veno-occlusive disease (Budd-Chiari syndrome) in humans.

GUAJILLO (*Acacia berlandieri*); foliage; plant is cyanogenetic.

Gymnocladus dioica (KENTUCKY COFFEE TREE); seeds; nervous system affected by nicotine-like toxins.

H

Halogeton glomeratus (BARILLA, HALOGETON); leaves, stems; plant contains soluble oxalates.

Haplopappus venetus (COAST GOLDENBUSH); plant may contain toxic levels of nitrates.

Hedera helix (ENGLISH IVY); berries, leaves; gastrointestinal tract affected by saponins; plant also causes dermatitis.

Helenium spp. (BITTERWEED, PINGUE, RUBBERWEED, SNEEZEWEED); plant causes dermatitis.

Helianthus annuus (WILD ARTICHOKE, WILD SUNFLOWER); plant may contain toxic levels of nitrates.

HELIEBORE (*Ranunculus* spp.); sap; gastrointestinal tract and nervous system affected by the toxin protoanemonin; plant also causes dermatitis.

HELIOTROPE (*Heliotropium* spp.); entire plant; pyrrolizidine alkaloid causes hepatic veno-occlusive disease (Budd-Chiari syndrome) in humans.

Heliotropium spp. (HELIOTROPE); entire plant; pyrrolizidine alkaloid causes hepatic veno-occlusive disease (Budd-Chiari syndrome) in humans.

HELLEBORE (*Helleborus niger*); entire plant; cardiovascular system affected by the glycosides helleborin and helleborein; plant also causes dermatitis.

Helleborus niger (CHRISTMAS ROSE, HELLEBORE); entire plant; cardiovascular system affected by the glycosides helleborin and helleborein; plant also causes dermatitis.

HEMLOCK (*Conium maculatum*); entire plant, esp. roots and seeds; nervous system affected by the alkaloids coniine, conidine, and coniceine; may contain toxic levels of nitrates; plant also causes dermatitis.

HENBANE (*Hyoscyamus niger*); seeds; nervous system affected by the alkaloids atropine, scopolamine, and hyoscyamine.

Heteromeles arbutifolia (CHRISTMAS-BERRY); leaves; plant is cyanogenetic.

HIGUERETA (*Ricinus communis*); seeds; gastrointestinal tract affected by toxalbumins; plant also causes dermatitis.

Hippobroma longiflora (HORSE POISON, MADAM FATA); entire plant; plant contains convulsants.

Hippomane mancinella (MANCHINEEL); latex; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

Holcus lanatus (VELVET GRASS, MESQUITE GRASS); fresh or wilted plant; plant is cyanogenetic.

HOLLY (*Ilex* spp.); berries; gastrointestinal tract affected by saponins.

HONEYSUCKLE BUSH (*Lonicera* spp); berries; gastrointestinal tract, cardiovascular and nervous systems affected by plant toxins.

HORSEBEAN (*Parkinsonia aculeata*); plant may contain toxic levels of nitrates.

HORSEBRUSH (*Tetradymia glabrata*); leaves; plant is hepatogenic.

HORSE CHESTNUT (*Aesculus* sp.); nuts, immature growths; gastrointestinal tract affected by saponins.

HORSE NETTLE (*Solanum* sp.); immature growths; gastrointestinal tract affected by solanine glycoalkaloids; may contain toxic levels of nitrates; plant also causes dermatitis.

HORSE POISON (*Hippobroma longiflora*); entire plant; plant contains convulsants.

HORSETAILS (*Equisetum* spp.); stems; toxic principles uncertain; fungi growing on plant may cause toxicity.

Hura crepitans (MONKEY PISTOL, JAVILLO, SANDBOX TREE); seeds; gastrointestinal tract affected by toxalbumins; plant also causes dermatitis.

HYACINTH (*Hyacinthus orientalis*); bulbs; gastrointestinal tract affected by alkaloid toxins; plant also causes dermatitis.

Hyacinthus orientalis (HYACINTH); bulbs; gastrointestinal tract affected by alkaloid toxins; plant also causes dermatitis.

Hydrangea spp. (HYDRANGEA); flower buds; plant is cyanogenetic; plant also causes dermatitis.

Hyoscyamus niger (HENBANE); seeds; nervous system affected by the alkaloids atropine, scopolamine, and hyoscyamine.

Hypericum perforatum (GOAT WEED, KLAMATH WEED, ST. JOHNSWORT); entire plant; plant causes photosensitization and contact dermatitis.

I

Ilex spp. (HOLLY, YAUPON); berries; gastrointestinal tract affected by saponins.

INDIAN HEMP (*Apocynum cannabinum*); leaves; plant contains cardiac glycosides.

INDIAN KALE (*Xanthosoma* spp.); leaves; mouth affected by irritant raphides; plant also causes dermatitis.

INDIAN POKE (*Veratrum* sp.); entire plant; cardiovascular system affected by alkaloid toxins; plant also causes dermatitis.

INDIAN TOBACCO (*Lobelia inflata*); leaves, stems, fruit; nervous system affected by pyridine, a nicotine-like toxin; plant also causes dermatitis.

INDIAN TURNIP (*Arisaema triphyllum*); entire plant; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides; plant also causes dermatitis.

INDIA WHEAT (*Fagopyrum tataricum*); plant causes photosensitization.

INDIGO (*Cassia* sp.); entire plant; gastrointestinal tract affected by toxalbumins.

Ipomea spp. (BINDWEED, MORNING GLORIES, SWEET POTATO VINES); entire plant; plant contains LSD-related hallucinogens; may contain toxic levels of nitrates.

Iris spp. (IRIS, FLAG); rootstocks; gastrointestinal tract affected by the glycoside iridin; plant also causes dermatitis.

ITALIAN ARUM (*Arum italicum*); entire plant; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides; plant also causes dermatitis.

J

JACK-IN-THE-PULPIT (*Arisaema triphyllum*, other species); entire plant; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides; plant also causes dermatitis.

JAPANESE LANTERN (*Physalis* spp.); unripe berries; gastrointestinal tract affected by solanine glycoalkaloids.

JAPAN PLUM (*Eriobotrya japonica*); kernel in pit; plant is cyanogenetic.

JASMINE (*Cestrum* spp.); fruit, sap; gastrointestinal tract affected by solanine glycoalkaloids; nervous system affected by atropine-like toxins.

Jatropha spp. (BELLYACHE BUSH, CORAL PLANT, CURCAS BEAN, GOUT STALK, JICAMILLA, PEREGRINA, PHYSIC NUT, PURGE NUT); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils; plant also causes dermatitis.

JAVA BEAN (*Phaseolus lunatus*); entire plant; plant is cyanogenetic.

JAVILLO (*Hura crepitans*); seeds; gastrointestinal tract affected by toxalbumins, plant also causes dermatitis.

JEQUIRITY BEAN (*Abrus precatorius*); seeds; gastrointestinal tract affected by toxalbumins.

JERUSALEM CHERRY (*Solanum pseudocapsicum*); immature growths; gastrointestinal tract affected by solanine glycoalkaloids; may contain toxic levels of nitrates; plant also causes dermatitis.

JETBEAD (*Rhodotypos scandens*); berries; plant is reputed to contain a cyanogenic glycoside.

JICAMILLA (*Jatropha* spp.); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils, plant also causes dermatitis.

JIMMY WEED (*Aplopappus heterophyllus*); leaves; plant may contain toxic levels of nitrates.

JIMSON WEED (*Datura stramonium*); entire plant; nervous system affected by the alkaloids atropine, scopolamine, and hyoscyamine; may contain toxic levels of nitrates; plant also causes dermatitis.

JOE-PYE WEED (*Eupatorium* sp.); plant may contain toxic levels of nitrates.

JOHNSON GRASS (*Sorghum halepense*); leaves; plant is cyanogenetic.

JONQUIL (*Narcissus* sp.); bulbs; gastrointestinal tract affected by alkaloid toxins; plant also causes dermatitis.

Juncus inflexus (BLUE RUSH); plant causes convulsions in cattle.

K

KALE (*Brassica* sp.); leaves; plant is goitrogenic.

Kalmia spp. (CALICO BUSH, LAMBKILL, MOUNTAIN LAUREL, SHEEP LAUREL); leaves, nectar; gastrointestinal tract, cardiovascular and nervous systems affected by the toxins andromedotoxin and arbutin.

Karwinskia humboldtiana (BUCKTHORN, COYOTILLO); fruit; nervous system affected by plant toxins.

KENTUCKY COFFEE TREE (*Gymnocladus dioica*); seeds; nervous system affected by nicotinellike toxins.

KLAMATH WEED (*Hypericum perforatum*); entire plant; plant causes photosensitization and contact dermatitis.

Kochia scoparia (FIREBALL, MEXICAN FIREWOOD, SUMMER CYPRESS); plant may contain toxic levels of nitrates.

L

LABRADOR TEA (*Ledum* spp.); leaves; plant contains toxic resins.

Laburnum x watereri (GOLDENCHAIN TREE, LABURNUM); entire plant, esp. seeds; nervous system affected by cytisine, a nicotine-like alkaloid.

Lactuca sariola (PRICKLY LETTUCE); plant may contain toxic levels of nitrates.

LADY SLIPPER (*Cypripedium spectabile*); plant causes dermatitis.

LADY'S THUMB (*Polygonum persicaria*); plant may contain toxic levels of nitrates; plant also causes photosensitization and contact dermatitis.

LAMBKILL (*Kalmia augustifolia*); leaves, nectar; gastrointestinal tract, cardiovascular and nervous systems affected by andromedotoxin and arbutin.

LAMB'S QUARTERS (*Chenopodium album*); plant may contain toxic levels of nitrates.

Lantana camara (COMMON LANTANA); immature berries; nervous system affected by lantodene, an atropine-like toxin; plant is also hepatogenic.

LARKSPUR (*Delphinium* spp.); leaves; cardiovascular system affected by alkaloids including delphinine; plant also causes dermatitis.

Lathyrus spp. (CALEY PEA, SINGLETARY PEA, SWEET PEA, VETCHLING, WILD PEA); stems, seeds; nervous system affected by plant toxins.

LAUREL (*Rhododendron* spp.); leaves; cardiovascular system affected by the resinoid andromedotoxin.

LECHUGUILLA (*Agave lecheguilla*); plant is hepatogenic.

Ledum spp. (LABRADOR TEA); leaves; plant contains toxic resins.

LEEK (*Allium tricoccum*); bulbs, bulblets, flowers, stems; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

LESSER HEMLOCK (*Aethusa cynapium*); entire plant; gastrointestinal tract affected by alkaloid toxins.

Leucothoe spp. (DOG HOBBLE, PEPPER BUSH, SWEET BELLS, WHITE OSIER); leaves, nectar; cardiovascular and nervous systems affected by plant toxins.

Ligustrum vulgare (COMMON PRIVET, PRIVET); entire plant; gastrointestinal tract affected by the glycoside ligustrin.

LILY-OF-THE-FIELDS (*Anemone* spp.); entire plant; gastrointestinal tract affected by the toxin protoanemonin.

LILY-OF-THE-VALLEY (*Convallaria majalis*); entire plant; cardiovascular system affected by the glycosides convallarin and convallamarin.

LIMA BEAN (*Phaseolus lunatus*); entire plant; plant is cyanogenetic.

LINSEED (*Linum usitatissimum*); entire plant, esp. immature seed pods; plant is cyanogenetic and goitrogenic.

Linum spp. (FLAX, LINSEED, YELLOW PINE FLAX); entire plant, esp. immature seed pods; plant is cyanogenetic. FLAX and LINSEED (*L. usitatissimum*) may contain toxic levels of nitrates, and plants are goitrogenic. YELLOW PINE FLAX (*L. neomexicanum*) contains saponins which affect gastrointestinal tract.

Lobelia spp. (CARDINAL FLOWER, LOBELIA, INDIAN TOBACCO); leaves, stems, fruit; nervous system affected by pyridine, a nicotine-like toxin; plant also causes dermatitis.

LOCOWEEDS (*Astragalus* spp., *Oxytropis* spp.); entire plant; may absorb toxic levels of selenium.

Lonicera spp. (HONEYSUCKLE BUSH); berries; gastrointestinal tract, cardiovascular and nervous systems affected by plant toxins.

LOQUAT (*Eriobotrya japonica*); kernel in pit; plant is cyanogenetic.

LORDS & LADIES (*Arum maculatum*); entire plant; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides; plant also causes dermatitis.

Lotus corniculatus (BIRDSFOOT TREFOIL); entire plant; plant is cyanogenetic.

LUPINES (*Lupinus* spp.); leaves, esp. seeds; plant contains numerous alkaloid toxins including quinolizidine and piperidine.

Lupinus spp. (BLUEBONNETS, LUPINES, PURSH, SILKY LUPINE); leaves, esp. seeds; plant contains numerous alkaloid toxins including quinolizidine and piperidine.

Lycium spp. (MATRIMONY VINE); leaves; gastrointestinal tract affected by plant toxins.

Lycopersicon esculentum (TOMATO); vines, suckers; gastrointestinal tract affected by solanine glycoalkaloids.

Lygodesmia juncea (SKELETONWEED); plant may contain toxic levels of nitrates.

M

MADAM FATE (*Hippobroma longiflora*); entire plant; plant contains convulsants.

MALANGA (*Xanthosoma* spp.); leaves; mouth affected by irritant raphides; plant also causes dermatitis.

MALLOW (*Malva parviflora*); plant may contain toxic levels of nitrates.

Malus spp. (APPLES); seeds; plant is cyanogenetic.

Malva parviflora (CHEESEWEED, MALLOW); plant may contain toxic levels of nitrates.

MANCHINEEL (*Hippomane mancinella*); latex; toxins affect gastrointestinal tract; plant also causes dermatitis.

Mandragora officinarum (MANDRAKE); nervous system affected by the toxins hyoscyamine and mandragorin.

MANDRAKE (*Mandragora officinarum*); nervous system affected by the toxins hyoscyamine and mandragorin.

MANGOLD (*Beta vulgaris*); leaves; plant contains soluble oxalates; may contain toxic levels of nitrates.

Manihot esculenta (CASSAVA); leaves, esp. Roots; plant is cyanogenetic.

MARIJUANA (*Cannabis sativa*); leaves, flower bracts; plant contains the hallucinogens tetrahydrocannabinols.

MARSH MARIGOLD (*Caltha palustris*); entire plant, gastrointestinal tract affected by the toxin protoanemonin; plant also causes dermatitis.

MARVEL OF PERU (*Mirabilis jalapa*); entire plant; gastrointestinal tract affected by the alkaloid tri gonelline; plant also causes dermatitis.

MATRIMONY VINE (*Lycium* spp.); leaves; gastrointestinal tract affected by plant toxins.

MAY APPLE (*Podophyllum peltatum*); entire plant except fruit; nervous system affected by plant toxins; also cause hematological abnormalities; powdered root may cause conjunctivitis and keratitis.

MEADOW BRAKE (*Onoclea sensibilis*); leaves; nervous system affected by plant toxins.

MEADOW SAFFRON (*Colchicum autumnale*); entire plant; gastrointestinal tract affected by colchicine and other alkaloids; plant also causes dermatitis.

Medicago denticulata (BUR CLOVER); plant causes photosensitization.

Melia azedarach (BEAD TREE, CHINABERRY TREE, PRIDE-OF-INDIA); fruit, bark; plant contains convulsants.

Melilotus spp. (WHITE OR YELLOW SWEETCLOVERS); plant may contain toxic levels of nitrates.

Menispermum canadense (MOONSEED); fruit; plant contains convulsants.

Menziesia ferruginea (RUSTYLEAF); leaves; plant contains toxic resins.

MESCAL BEAN (*Sophora secundiflora*); seeds; nervous system affected by the nicotine-like, quinolizidine alkaloids.

MESQUITE GRASS (*Holcus lanatus*); fresh or wilted plant; plant is cyanogenetic.

Metopium toxiferum (POISON WOOD); plant causes dermatitis.

MEXICAN FIREWOOD (*Kochia scoparia*); plant may contain toxic levels of nitrates.

MEXICAN POPPY (*Argemone mexicana*); entire plant; isoquinoline alkaloid causes "epidemic dropsy" in humans.

MEZEREON (*Daphne mezereum*); entire plant, esp. fruit and seeds; gastrointestinal tract and kidneys affected by coumarin glycosides; plant also causes dermatitis.

MILK BUSH (*Euphorbia* spp.); latex; gastrointestinal tract affected by the toxin euphorbin; may contain toxic levels of nitrates; plant also causes dermatitis.

MILKWEEDS (*Asclepias* spp.); leaves, stems; plant contains toxic resins.

MINER'S LETTUCE (*Montia perfoliata*); plant may contain toxic levels of nitrates.

Mirabilis jalapa (FOUR O'CLOCK, MARVEL OF PERU); entire plant; gastrointestinal tract affected by the alkaloid trigonelline; plant also causes dermatitis.

MISTLETOES (*Phoradendron* spp.); leaves, stems, berries; gastrointestinal tract affected by toxalbumins; plant also causes dermatitis.

MOCCASIN FLOWER (*Cypripedium spectabile*); plant causes dermatitis.

MOCK AZALEA (*Adenium* spp.); entire plant; cardiovascular system affected by digitalis-like glycosides.

MOCK ORANGE (*Poncirus trifoliata*); fruit; gastrointestinal tract affected by plant toxins.

Momordica spp. (BALSAM APPLE, BALSAM PEAR, BITTER GOURD, WHITE BALSAM APPLE); seeds; gastrointestinal tract affected by toxalbumins.

MONKEY PISTOL (*Hura crepitans*); seeds; gastrointestinal tract affected by toxalbumins.

MONKEY POD (*Samonia samon*); gastrointestinal tract affected by saponins; plant also causes dermatitis.

MONKSHOOD (*Aconitum* spp.); entire plant, esp. leaves and roots; cardiovascular system affected by alkaloid toxins.

Montia perfoliata (MINER'S LETTUCE); plant may contain toxic levels of nitrates.

MOONSEED (*Menispermum canadense*); fruit; plant contains convulsants.

MORNING GLORIES (*Ipomea* spp.); entire plant; plant contains LSD-related hallucinogens; may contain toxic levels of nitrates.

MOUNTAIN LAUREL (*Kalmia latifolia*); leaves, nectar; gastrointestinal tract, cardiovascular and nervous systems affected by the toxins andromedotoxin and arbutin.

MOUNTAIN-MAHOGANY (*Cercocarpus montanus*); wilted leaves; plant is cyanogenetic.

MUSHROOMS (many wild varieties); see appropriate literature for toxicities.

MUSTARD (*Brassica* sp.); leaves; plant is goitrogenic; may contain toxic levels of nitrates.

Myoporum laetum (no trivial [common] name in U.S.); fruit, esp. leaves; plant contains convulsants.

N

NAKED-LADY LILY (*Amaryllis* sp.); bulbs; gastrointestinal tract affected by alkaloid toxins.

Narcissus spp. (DAFFODIL, JONQUIL); bulbs; gastrointestinal tract affected by alkaloid toxins; plant also causes dermatitis.

Nerium oleander (OLEANDER); entire plant, and water used for cut plants; cardiovascular system affected by the glycosides oleandrin, oleandroside, and nerioside; plant also causes dermatitis.

NETTLE (*Urtica procera*); plant may contain toxic levels of nitrates.

Nicotiana spp. (TOBACCO, TREE TOBACCO); leaves; nervous system affected by the alkaloids nicotine and pyridine.

NIGHT-BLOOMING JESSAMINE (*Cestrum nocturnum*); fruit, sap; gastrointestinal tract affected by solanine glycoalkaloids; nervous system affected by atropine-like toxins.

NIGHTSHADES (*Solanum* spp.); immature growths; gastrointestinal tract affected by solanine glycoalkaloids; may contain toxic levels of nitrates; plant also causes dermatitis.

Nolina texana (BUNCH GRASS, SACAHUISTA); foliage; plant is hepatogenic.

NUX-VOMICA TREE (*Strychnos nux-vomica*); entire plant; nervous system affected by the alkaloid strychnine.

O

OAKS (*Quercus* spp); buds, leaves; oak tannin causes gastritis and nephritis.

OATS (*Avena saliva*); nontoxic unless contaminated with smut or fungi.

Oenanthe crocata (WATER DROPWORT); entire plant; plant contains the convulsant oenanthe toxin.

OLEANDER (*Nerium oleander*, other species); entire plant, and water used for cut plants; cardiovascular system affected by the glycosides oleandrin, oleandroside, and nerioside; plant also causes dermatitis.

ONION (*Allium cepa*); bulbs, bulblets, flowers, stems; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

Onoclea sensibilis (MEADOW BRAKE, POLYPODY BRAKE, SENSITIVE FERN); leaves; nervous system affected by plant toxins.

Oenothera spp. (GOLDENWEEDS); entire plant; plant may absorb toxic levels of selenium.

OPIUM POPPY (*Papaver somniferum*); unripe seedpods; plant contains a wide variety of alkaloids including morphine, codeine, papaverine, narcotine, and isoquinoline.

Ornithogalum spp. (STAR-OF-BETHLEHEM, WONDER FLOWER); entire plant, esp. bulbs; gastrointestinal tract affected by alkaloid toxins.

Oxalis pes-caprae (BERMUDA BUTTERCUP, BERMUDA OXALIS, SORREL, SOURSOB); leaves; plant contains soluble oxalates.

Oxytenia acerosa (COPPERWEED); leaves; toxic principle unknown.

Oxytropis spp. (LOCOWEEDS, POINT VETCH); entire plant; plant is reputed to be toxic.

P

Panicum capillare (PANIC-GRASS, WITCHGRASS); plant is hepatogenic; may contain toxic levels of nitrates.

Papaver somniferum (OPIUM POPPY); unripe seedpods; plant contains a wide variety of alkaloids including morphine, codeine, papaverine, narcotine, and isoquinoline.

Parkinsonia aculeata (HORSEBEAN); plant may contain toxic levels of nitrates.

PASQUE FLOWER (*Anemone* spp.; includes *Pulsatilla* spp.); entire plant; gastrointestinal tract affected by the toxin protoanemonin; plant also causes dermatitis.

Pastinaca sativa (WILD PARSNIP); plant causes dermatitis.

PEACE LILY (*Spathiphyllum* spp.) entire plant; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

PEACH (*Prunus* spp.); seeds; plant is cyanogenetic.

Pedilanthus tithymaloides (SLIPPER FLOWER); latex; gastrointestinal tract affected by plant toxins.

PEPPER BUSH (*Leucothoe* spp.); leaves, nectar; cardiovascular and nervous systems affected.

PEREGRINA (*Jatropha integerrima*); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils; plant also causes dermatitis.

PERIWINKLE (*Vinca* spp.); entire plant; plant contains hallucinogens.

Pernettya spp. (no trivial names in U.S.); leaves, nectar; cardiovascular system affected by plant toxins.

Phaseolus lunatus (JAVA BEAN, LIMA BEAN); entire plant; plant is cyanogenetic.

PHEASANT'S EYE (*Adonis* spp.); entire plant; cardiovascular system affected by cardiac glycosides.

Philodendron spp. (PHILODENDRON); leaves; mouth irritated by plant raphides.

Phoradendron spp. (MISTLETOES); leaves, stems, berries; gastrointestinal tract affected by toxalbumins; plant also causes dermatitis.

Physalis spp. (CHINESE LANTERN, GROUND CHERRY, JAPANESE LANTERN, POHA); unripe berries; gastrointestinal tract affected by solanine glycoalkaloids.

PHYSIC NUT (*Jatropha curcas*); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils; plant also causes dermatitis.

Phytolacca americana (PIGEONBERRY, POKEBERRY, POKEWEED); leaves, roots; gastrointestinal tract affected by saponins.

Pieris spp. (FETTERBUSH); leaves, nectar; cardiovascular and nervous systems affected by plant toxins.

PIGEONBERRY (*Phytolacca americana*); all parts, esp. roots; gastrointestinal tract affected by saponins.

PIG-LILLY (*Zantedeschia* spp.); leaves; mouth irritated by plant raphides.

PIGWEEED (*Chenopodium* spp.); entire plant; may contain toxic levels of nitrates.

PINGUE (*Helenium* spp.); plant causes dermatitis.

Plagiobothrys sp. (POPCORN FLOWER); plant may contain toxic levels of nitrates.

PLUM (*Prunus* spp.); seeds; plant is cyanogenetic.

PLUMELESS THISTLE (*Carduus* sp.); plant may contain toxic levels of nitrates.

Podophyllum peltatum (MAY APPLE); entire plant except fruit; plant toxins affect nervous system and cause hematological abnormalities; powdered root may cause conjunctivitis and keratitis.

POHA (*Physalis* spp.); unripe berries; gastrointestinal tract affected by solanine glycoalkaloids.

POINSETTIA (*Euphorbia pulcherrima*); latex; gastrointestinal tract affected by the toxin euphorbin, may contain toxic levels of nitrates; plant also causes dermatitis.

POINT VETCH (*Oxytropis* spp.); entire plant; plant is reputed to be toxic.

POISON HEMLOCK (*Conium maculatum*); entire plant, esp. roots and seeds; nervous system affected by alkaloids including coniine, conidine, and coniceine; may contain toxic levels of nitrates; plant also causes dermatitis.

POISON IVY (*Toxicodendron radicans*); leaves, bark, and fruit cause dermatitis.
POISON OAK (*Toxicodendron* spp.); leaves, bark, and fruit cause dermatitis.

POISON SUCKLEYA (*Suckleya suckleyana*); leaves; plant is cyanogenetic.

POISON SUMAC (*Toxicodendron vernix*); leaves, bark, and fruit cause dermatitis.

POISONVETCHES (*Astragalus* spp.); entire plant: may absorb toxic levels of selenium.

POISON WOOD (*Metopium toxiferum*); plant causes dermatitis.

POKEBERRY, POKEWEED (*Phytolacca americana*); leaves, roots; gastrointestinal tract affected by saponins.

Polygonum spp. (LADY'S THUMB, SMARTWEEDS); plant may contain toxic levels of nitrates; also causes photosensitization and contact dermatitis.

POLYPODY BRAKE (*Onoclea sensibilis*); leaves; nervous system affected by plant toxins.

Poncirus trifoliata (MOCK ORANGE, TRIFOLIATE ORANGE); fruit; gastrointestinal tract affected by plant toxins.

POPCORN FLOWER (*Plagiobothrys* sp.); plant may contain toxic levels of nitrates.

POTATO (*Solanum tuberosum*); immature growths; gastrointestinal tract affected by solanine glycoalkaloids; may contain toxic levels of nitrates; plant also causes dermatitis.

PRECATORY BEAN (*Abrus precatorius*); seeds; gastrointestinal tract affected by toxalbumins.

PRICKLY LETTUCE (*Lactuca scariola*); plant may contain toxic levels of nitrates.

PRICKLY POPPY (*Argemone mexicana*); entire plant; isoquinoline toxin causes "epidemic dropsy" in humans.

PRIDE-OF-INDIA (*Melia azedarach*); fruit, bark; plant contains convulsants.

PRIMROSE (*Primula* spp.); leaves cause dermatitis.

Primula spp. (PRIMROSE); leaves cause dermatitis.

PRINCESS'S PLUME (*Stanleya pinnata*); entire plant; may absorb toxic levels of selenium.

PRIVET (*Ligustrum vulgare*); entire plant; gastrointestinal tract affected by the glycoside ligustrin.

Prunus spp. (APRICOT, CHERRY, CHERRY LAUREL, PLUM, PEACH); seeds; plant is cyanogenetic.

Ptelea baldwinii (WAFER ASH); plant causes photosensitization and contact dermatitis.

Pteridium spp. (BRACKEN FERN, BRAKE FERN, EAGLE FERN); fronds; plant contains thiaminase.

PUNCTURE VINE (*Tribulus terrestris*); plant is hepatogenic; may contain toxic levels of nitrates.

PURGE NUT (*Jatropha* spp.); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils: plant also causes dermatitis.

PURPLE ALLAMANDA (*Cryptostegia* sp.); entire plant; cardiovascular system affected by digitalislike glycosides.

PURPLECOCKLE (*Agrostemma githago*); seeds; gastrointestinal tract affected by saponins.

PURPLE FOXGLOVE (*Digitalis purpurea*); entire plant; cardiovascular system affected by the glycosides digitalin and digitoxin; gastrointestinal tract affected by saponins.

PURSH (*Lupinus* sp.); leaves, esp. seeds; plant contains numerous alkaloid toxins including quinolizidine and piperidine.

Q

QUEEN'S DELIGHT (*Stillingia trecaleana*); leaves, stems; plant is cyanogenetic.

Quercus spp. (OAKS); buds, leaves; oak tannin causes gastritis and nephritis.

R

Rafinesquia californica (CALIFORNIA CHICORY); plant may contain toxic levels of nitrates.

RAGWORT (*Senecio jacobaea*); entire plant; pyrrolizidine alkaloids cause hepatic veno-occlusive disease (Budd-Chiari syndrome) in humans.

RAIN TREE (*Samonia samon*); gastrointestinal tract affected by saponins; plant also causes dermatitis.

Ranunculus spp. (BUTTERCUPS, CROWFOOTS, HELIEBORE); sap; gastrointestinal tract and nervous system affected by the toxin protoanemonin; plant also causes dermatitis.

RATTLEBOX (*Crotalaria* sp.); entire plant; pyrrolizidine alkaloids cause hepatic veno-occlusive disease (Budd-Chiari syndrome) in humans.

RATTLEBUSH, RATTLEBOX (*Sesbania* spp.); seeds; gastrointestinal tract affected by saponins.

RAYLESS (*Aplopappus heterophyllus*); leaves; plant may contain toxic levels of nitrates.

RED PUCCOON (*Sanguinaria canadensis*); juices from stems and rootstocks cause dermatitis.

RED SQUILL (*Urginea maritima*); bulbs; cardiovascular system affected by cardiac glycosides.

RESCUE GRASS (*Bromus* sp.); plant may contain toxic levels of nitrates.

Rhamnus spp. (BUCKTHORN, also see *Karwinskia humboldtiana*); fruit, bark; gastrointestinal tract affected by plant toxins.

Rheum rhaponticum (RHUBARB); leaf blades; plant contains cathartic toxins, including oxalic acid.

Rhododendron spp. (AZALEAS, LAUREL, RHODODENDRON); leaves; cardiovascular system affected by the resinoid andromedotoxin.

Rhodotypos scandens (JETBEAD); berries; plant is reputed to contain a cyanogenic glycoside.

RHUBARB (*Rheum rhaponticum*); leaf blades; plant contains cathartic toxins including oxalic acid.

RICINO (*Ricinus communis*); seeds; gastrointestinal tract affected by toxalbumins; plant also causes dermatitis.

Ricinus communis (CASTOR BEAN, HIGUERETA, RICINO); seeds; gastrointestinal tract affected by toxalbumins; plant also causes dermatitis.

Rivina humilis (ROUGE PLANT); leaves, roots; gastrointestinal tract affected by plant toxins.

Robinia pseudoacacia (BLACK LOCUST); bark, seeds, leaves; gastrointestinal tract affected by toxalbumins.

ROCKY MOUNTAIN BEE PLANT (*Cleome serrulata*); plant may contain toxic levels of nitrates.

ROSARY PEA (*Abrus precatorius*); seeds; gastrointestinal tract affected by toxalbumins.

ROUGE PLANT (*Rivina humilis*); leaves, roots; gastrointestinal tract affected by toxalbumins.

RUBBER VINE (*Cryptostegia* sp.); entire plant; cardiovascular system affected by digitalis-like glycosides.

RUBBERWEED (*Helenium* spp.); plant causes dermatitis.

RUE (*Ruta graveolens*); gastrointestinal tract affected by the toxins furocoumarins, tannins, and xantotoxins; plant also causes photosensitization.

Rumex spp. (DOCKS, SHEEP SORREL); leaves; plant contains soluble oxalates; may contain toxic levels of nitrates; plant also causes dermatitis.

RUSTYLEAF (*Menziesia ferruginea*); leaves; plant contains toxic resins.

Ruta graveolens (RUE); gastrointestinal tract affected by the toxins furocoumarins, tannins, and xantotoxins; plant also causes photosensitization.

S

SACAHUISTA (*Nolina texana*); foliage; plant is hepatogenic.

SAGE (*Salvia reflexa*); leaves of certain varieties contain toxic levels of nitrates.

Salvia reflexa (SAGE); leaves of certain varieties contain toxic levels of nitrates.

Sambucus spp. (ELDERBERRY); entire plant; plant is cyanogenetic; may contain toxic levels of nitrates.

Samonia samon (MONKEY POD, RAIN TREE); gastrointestinal tract affected by saponins; plant also causes dermatitis.

SANDBOX TREE (*Hura crepitans*); seeds; gastrointestinal tract affected by toxalbumins; plant also causes dermatitis.

Sanguinaria canadensis (BLOODROOT, RED PUCCOON); juices from stems and rootstocks cause dermatitis.

Saponaria spp. (BOUNCING BET, COWCOCKLE); seeds; gastrointestinal tract affected by saponins.

Sarcobatus vermiculatus (GREASEWOOD); plant contains soluble oxalates; also causes dermatitis.

SCARLET PIMPERNEL (*Anagallis arvensis*); leaves; plant causes dermatitis.

SCOTCH BROOM (*Cytisus scoparius*); seeds; plant contains quinolizidine alkaloid toxins.

SCOURING RUSH (*Equisetum* spp.); stems; toxic principles unknown; fungi growing on plants may cause toxicity.

SEA ONION (*Urginea maritima*); bulbs; cardiovascular system affected by cardiac glycosides.

Senecio spp. (GROUNDSEL, RAGWORT); entire plant; pyrrolizidine alkaloids cause hepatic venoocclusive disease (Budd-Chiari syndrome) in humans.

SENNA (*Cassia occidentalis*); entire plant: plant contains cathartic toxins.

SENSITIVE FERN (*Onoclea sensibilis*); leaves; nervous system affected by plant toxins.

Sephora secundiflora (FRIJOLITO, MESCAL BEAN); seeds; nervous system affected by nicotine-like quinolizidine alkaloids.

Sesbania spp. (BAGPOD, COFFEEWEED, RATTLEBOX, RATTLEBUSH); seeds; gastrointestinal tract affected by saponins.

SHEEP LAUREL (*Kalmia augustifolia*); leaves, nectar; gastrointestinal tract, cardiovascular and nervous systems affected by the toxins andromedotoxin and arbutin.

SHEEP SORREL (*Rumex acetosella*); leaves; plant contains soluble oxalates; may contain toxic levels of nitrates; plant also causes dermatitis.

SHOWY LADY SLIPPER (*Cypripedium reginae*); plant causes dermatitis.

SICKLEPOD (*Cassia* sp.); entire plant; gastrointestinal tract affected by toxalbumins.

SILKY LUPINE (*Lupinus* spp.); leaves, esp. Seeds; plant contains numerous alkaloid toxins including quinolizidine and piperidine.

Silybum marianum (VARIEGATED THISTLE); plant may contain toxic levels of nitrates.

SINGLETARY PEA (*Lathyrus* spp.); stems, seeds; nervous system affected by the plant toxins.

SKELETONWEED (*Lygodesmia juncea*); plant may contain toxic levels of nitrates.

SKUNK CABBAGE (*Symplocarpus foetidus*); leaves; gastrointestinal tract affected by plant toxins.

SLIPPER FLOWER (*Pedilanthus tithymaloides*); latex; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides.

SMARTWEEDS (*Polygonum* spp.); plant may contain toxic levels of nitrates; plant causes photosensitization and contact dermatitis.

SMOOTH BROMEGRASS (*Bromus* sp.); plant may contain toxic levels of nitrates.

SNAKE'S HEAD (*Fritillaria meleagris*); bulb; cardiovascular system affected by alkaloid toxins.

SNEEZEWEED (*Helenium* spp.); plant causes dermatitis.

SNOWBERRY (*Symphoricarpos albus*); gastrointestinal tract affected by saponins; plant also causes dermatitis.

SNOWDROP (*Galanthus nivalis*); gastrointestinal tract affected by the alkaloids lycorine and galantamine.

SNOW-ON-THE-MOUNTAIN (*Euphorbia marginata*); latex; gastrointestinal tract affected by the toxin euphorbin; may contain toxic levels of nitrates; plant also causes dermatitis.

Solanum spp. (BITTERSWEET, BUFFALO BUR, BULL NETTLE, HORSE NETTLE, JERUSALEM CHERRY, NIGHTSHADES, POTATO); immature growths; gastrointestinal tract affected by solanine glycoalkaloids; may contain toxic levels of nitrates; plant also causes dermatitis.

Sonchus spp. (SOW THISTLE); plant may contain toxic levels of nitrates.

Sophora secundiflora (FRIJOLITO, MESCAL BEAN); seeds; nervous system affected by nicotine-like, quinolizidine alkaloids.

Sorghum spp. (BROOMCORN, JOHNSON GRASS, SORGHUM, SUDAN GRASS); leaves; plant is cyanogenetic; may contain toxic levels of nitrates.

SORRELS (*Oxalis pes-caprae*, *Rumex* spp.); leaves; plant contains soluble oxalates; plant also causes dermatitis.

SOURGRASS (*Triglochin maritima*); leaves; plant is cyanogenetic.

SOURSOB (*Oxalis pes-caprae*); leaves; plant contains soluble oxalates.

SOW THISTLE (*Sonchus* spp.); plant may contain toxic levels of nitrates.

SOYBEAN (*Glycine max*); may contain toxic levels of nitrates; plant is goitrogenic.

SPATHE FLOWER (*Spathiphyllum* spp.); entire plant; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

Spathiphyllum spp. (SPATHE FLOWER, WHITE ANTHURIUM); entire plant; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

Spigelia spp. (WEST INDIAN PINKROOT); entire plant; nervous system affected by the toxin spigeline.

SPINDLE TREE (*Euonymus europaeus*); fruit; cardiovascular system affected by the glycosides evobioside, evomonoside, and evonoside.

SPINELESS HORSEBRUSH (*Tetradymia canescens*); leaves, buds; plant causes photosensitization.

SPREADING DOGBANE (*Apocynum androsaemifolium*); leaves; plant contains cardiac glycosides.

SPRING RABBITBUSH (*Tetradymia glabrata*); leaves, buds; plant is hepatogenic.

SPURGE LAUREL (*Daphne laureola*); entire plant, esp. fruit and seeds; gastrointestinal tract and kidneys affected by coumarin glycosides; plant also causes dermatitis.

SPURGE NETTLE (*Jatropha* spp.); seeds; gastrointestinal tract affected by toxalbumins and cathartic oils; plant also causes dermatitis.

SPURGES (*Euphorbia* spp.); leaves, stems, latex; gastrointestinal tract affected by the toxin euphorbin; may contain toxic levels of nitrates; plant also causes dermatitis.

SQUILL (*Urginea maritima*); bulbs; cardiovascular system affected by cardiac glycosides.

SQUIRREL CORN (*Dicentra cucullaria*); entire plant, esp. bulbs; plant contains convulsants including isoquinoline; plant also causes dermatitis.

STAGGERGRASS (*Amianthemum muscaetoxicum*); leaves, underground parts; alkaloids cause respiratory failure.

STAGGER WEED (*Dicentra cucullaria*); entire plant, esp. bulbs; plant contains convulsants including isoquinoline; plant also causes dermatitis.

Stanleya pinnata (PRINCES'S PLUME); entire plant; plant may absorb toxic levels of selenium.

STAR-OF-BETHLEHEM (*Omithogalum umbellatum*); entire plant, esp. bulbs; gastrointestinal tract affected by alkaloid toxins.

STEER'S HEAD (*Dicentra uniflora*); entire plant, esp. bulbs; plant contains convulsants including isoquinoline; plant also causes dermatitis.

Stellaria media (CHICKWEED); plant may contain toxic levels of nitrates.

Stillingia trecaleana (QUEEN'S DELIGHT); leaves, stems; plant is cyanogenetic.

ST. JOHNSWORT (*Hypericum perforatum*); entire plant causes photosensitization and contact dermatitis.

STRAWBERRY BUSH (*Euonymus americanus*); fruit; cardiovascular system affected by the glycosides evobioside, evomonoside, and evonoside.

STRYCHNINE (*Strychnos nux-vomica*); entire plant; nervous system affected by the alkaloid strychnine.

Strychnos nux-vomica (NUX-VOMICA TREE, STRYCHNINE); entire plant; nervous system affected by the alkaloid strychnine.

Suckleya suckleyana (POISON SUCKLEYA); leaves; plant is cyanogenetic.

SUDAN GRASS (*Sorghum* sp.); leaves; plant is cyanogenetic; may contain toxic levels of nitrates.

SUGAR BEET (*Beta vulgaris*); leaves; plant contains soluble oxalates; may contain toxic levels of nitrates.

SUMMER CYPRESS (*Kochia scoparia*); plant may contain toxic levels of nitrates.

SWEET BELLS (*Leucothoe* spp.); leaves, nectar; cardiovascular and nervous systems affected by plant toxins.

SWEETCLOVERS; WHITE, YELLOW (*Melilotus* spp.); plant may contain toxic levels of nitrates.

SWEET PEA (*Lathyrus* spp.); stems, seeds; nervous system affected by plant toxins.

SWEET POTATO VINES (*Ipomea* spp.); entire plant; plant contains LSD-related hallucinogens. may contain toxic levels of nitrates.

Symphoricarpos albus (SNOWBERRY); gastrointestinal tract affected by saponins; plant also causes dermatitis.

Symplocarpus foetidus (SKUNK CABBAGE); leaves; gastrointestinal tract affected by plant toxins; mouth irritated by plant raphides.

T

Tamus communis (BLACK BRYONY); toxic principles similar to *Bryonia dioica*.

Tanacetum vulgare (TANSY); leaves, stems; plant toxins may cause gastritis and convulsions; plant also causes dermatitis.

TANSY (*Tanacetum vulgare*); leaves, stems; plant toxins may cause gastritis and convulsions; plant also causes dermatitis.

TARBUSH (*Flourensia cernua*); fruit; gastrointestinal tract affected by plant toxins.

TARO (*Alocasis* sp., *Colocasia esculenta*); leaves, stems; mouth irritated by plant raphides.

TARWEED (*Amsinckia intermedia*); seed-like nutlets; plant may contain toxic levels of nitrates.

Taxus spp. (YEWS); entire plant, except red aril; gastrointestinal tract and cardiovascular system affected by volatile oils, and the alkaloids taxine and ephedrine.

Tetradymia glabrata (COAL-OIL BRUSH, HORSEBRUSH, SPRING RABBITBUSH); leaves: plant is hepatogenic.

Thevetia peruviana (YELLOW-BE-STILL-TREE, YELLOW OLEANDER); entire plant, esp. seeds; cardiovascular system affected by cardiac glycosides.

Thlaspi arvensis (FANWEED); seeds; gastrointestinal tract affected by mustard-oil.

THORNAPPLE (*Datura stramonium*); entire plant; nervous system affected by the alkaloids atropine, scopolamine, and hyoscyamine; may contain toxic levels of nitrates; plant also causes dermatitis.

THOROUGHWORT (*Eupatorium* sp.); plant may contain toxic levels of nitrates.

TOBACCO, TREE TOBACCO (*Nicotiana* spp.); leaves; nervous system affected by the alkaloids nicotine and pyridine.

TOMATO (*Lycopersicon esculentum*); vines, suckers; gastrointestinal tract affected by solanine glycoalkaloids.

Toxicodendron spp. (POISON IVY, POISON OAK, POISON SUMAC); leaves, bark and fruit cause dermatitis.

TRAVELLER'S JOY (*Clematis* spp.); entire plant; gastrointestinal tract and nervous system affected by plant toxins; plant also causes dermatitis.

TREFOIL (*Lotus corniculatus*); entire plant; plant is cyanogenetic.

Tribulus spp. (CALTROP, GOATHEAD, PUNCTURE VINE); plant is hepatogenic; may contain toxic levels of nitrates.

TRIFOLIATE ORANGE (*Poncirus trifoliata*); fruit; toxins affect gastrointestinal tract.

Trifolium spp. (CLOVERS); plant causes photosensitization and contact dermatitis; *T. repens* (WHITE CLOVER) is cyanogenetic.

Triglochin maritima (ARROWGRASS, GOOSEGRASS, SOURGRASS); leaves; plant is cyanogenetic.

Triticum aestivum (WHEAT); nontoxic unless contaminated with fungi.

TRUMPET VINE (Campsis spp.); leaves, flowers; plant also causes dermatitis.

Tulipa spp. (TULIPS); bulbs; plant causes dermatitis.

TUMBLEWEED (Amaranthus hybridus); plant may contain toxic levels of nitrates.

TUNG NUT3, TUNG TREE (Aleurites fordii); entire plant; gastrointestinal tract affected by saponins and toxalbumins.

U

Urechites lutea (YELLOW NIGHTSHADE); leaves; cardiovascular system affected by the cardiac glycoside urechitoxin.

Urginea maritima (RED SQUILL, SEA ONION, SQUILL); bulbs; cardiovascular system affected by cardiac glycosides.

Urtica procera (NETTLE); plant may contain toxic levels of nitrates.

V

VELVET GRASS (Holcus lanatus); entire plant; plant is cyanogenetic.

VENUS FLYTRAP (Dionaea sp.); entire plant.

Veratrum spp. (FALSE HELLEBORE, INDIAN POKE); entire plant; cardiovascular system affected by alkaloid toxins; plant also causes dermatitis.

Verbesina encelioides (CROWNBEARD); plant may contain toxic levels of nitrates.

VETCH (Vicia spp.); seeds, moldy parts; plant causes photosensitization.

VETCHLING (Lathyrus spp.); seeds, stems; nervous system affected by plant toxins.

Vicia sativa (COMMON VETCH); seeds, moldy parts; plant is cyanogenetic; plant also causes photosensitization.

Vinca spp. (PERIWINKLE); entire plant; contains hallucinogens.

VIPER'S BUGLOSS (Echium plantagineum); entire plant; pyrrolizidine alkaloids cause hepatic venoocclusive disease (Budd-Chiari syndrome) in humans.

VIRGIN'S-BOWER (Clematis sp.); entire plant; gastrointestinal tract and nervous system affected by plant toxins; plant also causes dermatitis.

Viscum album (EUROPEAN MISTLETOE); leaves, stems; gastrointestinal tract affected by toxalbumins.

W

WAFER ASH (Ptelea baldwinii); plant causes photosensitization and contact dermatitis.

WAHOO (*Euonymus atropurpureus*); fruit; cardiovascular system affected by the glycosides evobioside, evomonoside, and evonoside.

WATER DROPWORT (*Oenanthe crocata*); entire plant; plant contains the convulsant oenanthetoxin.

WATER HEMLOCK (*Cicuta* spp.); entire plant, esp. roots; nervous system affected by the convulsant cicutoxin.

WEST INDIAN PINKROOT (*Spigelia* spp.); entire plant; nervous system affected by the toxin spigeline.

WHEAT (*Triticum aestivum*); nontoxic unless contaminated with fungi.

WHITE ANTHURIUM (*Spathiphyllum* spp.); entire plant; gastrointestinal tract affected by plant toxins; plant also causes dermatitis.

WHITE ARUM-LILY (*Zantedeschia aethiopica*); leaves; mouth irritated by plant raphides.

WHITE BRYONY (*Bryonia dioica*); gastrointestinal tract affected by the glycosides bryonin and bryonidin; plant also causes dermatitis.

WHITE CALLA (*Zantedeschia aethiopica*); leaves; mouth irritated by plant raphides.

WHITE CLOVER (*Trifolium repens*); plant is cyanogenetic.

WHITE OZIER (*Leucothoe* spp.); leaves, nectar; cardiovascular and nervous systems affected by plant toxins.

WHITE SNAKEROOT (*Eupatorium* sp.); leaves; plant may contain toxic levels of nitrates.

WHITE SWEETCLOVER (*Melilotus* sp.); plant may contain toxic levels of nitrates.

WHORLED BUTTERFLY (*Asclepias* sp.); leaves, stems; plant contains toxic resins.

WILD ARTICHOKE (*Helianthus annuus*); plant may contain toxic levels of nitrates.

WILD BALSAM-APPLE (*Momordica charantia*); seeds; gastrointestinal tract affected by toxalbumins.

WILD PARSNIP (*Pastinaca sativa*); plant causes dermatitis.

WILD PEA (*Lathyrus* spp.); stems, seeds; nervous system affected by plant toxins.

WILD SUNFLOWER (*Helianthus annuus*); plant may contain toxic levels of nitrates.

WINDFLOWER (*Anemone* spp., includes *Pulsatilla*); entire plant; gastrointestinal tract affected by the toxin protoanemonin; plant also causes dermatitis.

WINTERSWEET (*Acokanthera* spp.); seeds; cardiovascular system affected by cardiac glycosides.

Wisteria spp. (WISTERIA); entire plant; gastrointestinal tract affected by alkaloid toxins.

WITCHGRASS (*Panicum capillare*); plant is hepatogenic; may contain toxic levels of nitrates.

WONDER FLOWER (*Ornithogalum thyrsoides*); entire plant, esp. bulbs; gastrointestinal tract affected by alkaloid toxins.

WOOD LAUREL (*Daphne* sp.); entire plant esp. fruit and seeds; gastrointestinal tract and kidneys affected by coumarin glycosides; plant also causes dermatitis.

WOODY ASTERS (*Xylorrhiza* spp.); entire plant; plant may absorb toxic levels of selenium.

WORMSEED (*Chenopodium ambrosioides*); plant may contain toxic levels of nitrates.

X

Xanthium orientale (COCKLEBUR); leaves at sprouted two-leaf stage, germinating seeds; plant contains hydroquinone; plant also causes dermatitis.

Xanthosoma spp. (BLUE TARO, CALADIUM, INDIAN KALE, MALANGA); leaves; mouth irritated by plant raphides; plant also causes dermatitis. *Xylorrhiza* spp. (WOODY ASTERS); entire plant; plant may absorb toxic levels of selenium.

Y

YAUPON (*Ilex vomitoria*); berries; gastrointestinal tract affected by saponins.

YELLOW ALLAMANDA (*Allamanda cathartica*); leaves, bark, fruit, sap, seeds; plant contains cathartic toxins.

YELLOW-BE-STILL TREE (*Thevetia peruviana*); entire plant, esp. seeds; cardiovascular system affected by cardiac glycosides.

YELLOW JESSAMINE (*Gelsemium sempervirens*); flowers, leaves, roots; plant contains convulsants, including indole; plant also causes dermatitis.

YELLOW LADY SLIPPER (*Cypripedium parviflorum*); leaves, stems; plant causes dermatitis.

YELLOW NIGHTSHADE (*Urechites lutea*); leaves; cardiovascular system affected by the cardiac glycoside urechitoxin.

YELLOW OLEANDER (*Thevetia peruviana*); entire plant, esp. seeds; cardiovascular system affected by cardiac glycosides.

YELLOW PINE FLAX (*Linum neomexicanum*); entire plant; plant is cyanogenetic.

YELLOW SWEETCLOVER (*Melilotus* sp.); plant may contain toxic levels of nitrates.

YEWS (*Taxus* spp.); entire plant, except red aril; gastrointestinal tract and cardiovascular system affected by volatile oils and the alkaloids taxine, and ephedrine.

Z

Zamia pumila (COONTIE, FALSE SAGO PALM, FLORIDA ARROWROOT); roots, trunk; gastrointestinal tract and nervous system affected by plant toxins.

Zantedeschia aethiopica (CALLA LILY, PIG LILY, WHITE ARUM LILY, WHITE CALLA); leaves; mouth irritated by plant raphides.

Zigadenus spp. (DEATH CAMAS); entire plant; cardiovascular system affected by alkaloid toxins.

The following footnotes are not contained in the Barnard book but I felt they might be helpful to readers.

1. raphe: the ridge or line on a seed where it attaches to the ovule wall.
2. aril: flesh, often brightly colored, cover of seed
3. Tung: tung oil, commonly found in paints, stains, and finishes, is also toxic and such preparations should not be used in animal enclosures

Kingsbury, J. M. 1964. *Poisonous Plants of the United States and Canada*. Prentice-Hall, Inc., Englewood Cliffs, NJ.

Lampe, K.F. and McCann, M.A. 1985. *American Medical Association Handbook of Poisonous and Injurious Plants*. Am. Med. Assoc., Chicago, IL.

Muenschler, W. C. 1970. *Poisonous Plants of the United States*. The MacMillan Company, New York.

Ruhr, L. P. 1986. Ornamental toxic plants. In: *Current Veterinary Therapy IX: Small Animal Practice*. W.B. Saunders Company, Philadelphia, PA, pp. 216-220.

Plants Causing Mechanical Injury

Susan M. Barnard. Reptile Keeper's Handbook. pp. 167-184. 1996. Reprinted by permission of author and Krieger Publishing Company, Malabar, FL

Anemone patens (ANEMONE)

Aplopappus spp. (GOLDENRODS, JIMMY WEED, RAYLESS).

Arctium lappa (BURDOCK).

Aristida spp. (POVERTY GRASS, TRIPPLE AWN, WIRE GRASS).

Avena fatua (WILD OATS)

BARLEY, WILD BARLEY (*Hordeum* spp.).

Bidens spp. (SPANISH NEEDLES, STICK-TIGHTS).

Bromus tectorum (DOWNY BROME-GRASS).

BURDOCK (*Arctium lappa*).

CACTI (many genera).

CALTROP (*Tribulus* sp.).

Cenchrus spp. (SANDBURS).

Centaurea spp. (KNAPWEED, STARTHISTLE).

COCKLEBURS (*Xanthium* spp.).

CRIMSON CLOVER (*Trifolium* sp.).

DOWNY BROME-GRASS (*Bromus tectorum*).

Eremocarpus setegerus (TURKEY MULLEIN).

Equisetum spp. (FOXTAILS, HORSETAILS, SCOURING RUSH).

FOXTAIL GRASS (*Setaria lutescens*).

FOXTAILS (*Equisetum* spp.).

GOATHEAD (*Tribulus* sp.).

GOLDENRODS (*Aplopappus* spp.).

Hordeum spp. (BARLEY, WILD BARLEY, SQUIRREL-TAIL GRASS).

HORSETAILS (*Equisetum* spp.).

JIMMY WEED (*Aplopappus* sp.).

KNAPWEED (*Centaurea* sp.).

MESQUITE (*Prosopis chilensis*).

MULLEIN (*Verbascum thapsus*).

NEEDLE GRASS (*Stipa* sp.).

NIGHTSHADES (*Solanum* spp.).

PEA STRAW HAY (*Pisum sativum*).

Pisum sativum (PEA STRAW HAY).

Platanus occidentalis (SYCAMORE).

PORCUPINE GRASS (*Stipa* sp.).

POVERTY GRASS (*Aristida* sp.).

Prosopis chilensis (MESQUITE).

PUNCTURE VINE (*Tribulus* sp.).

Pyracantha sp. (PYRACANTHA).

RABBIT-FOOT CLOVER (*Trifolium* sp.).

RASPBERRIES (*Rubus* spp.).

RAYLESS (*Aplopappus* sp.)-

Rubus spp. (RASBERRIES).

SANDBURS (*Cenchrus* spp.).

SCOURING RUSH (*Equisetum* sp.).

Setaria lutescens (FOXTAIL GRASS, YELLOW BRISTLE GRASS).

SPANISH NEEDLES (*Bidens* sp.).

SQUIRREL-TAIL GRASS (*Hordeum* spp.).

STARHISTLE (*Centaurea* spp.).

STICK-TIGHTS (*Bidens* sp.).

Stipa spp. (NEEDLE GRASS, PORCUPINE GRASS).

SYCAMORE (*Platanus occidentalis*).

Tribulus spp. (CALTROP, GOATHEAD, PUNCTURE VINE).

Trifolium spp. (CRIMSON CLOVER, RABBIT-FOOT CLOVER).

TRIPLE AWN (*Aristida* sp.).

TURKEY MULLEIN (*Eremocarpus setigerus*).

Verbascum thapsus (MULLEIN).

WILD OATS (*Avena fatua*).

WIRE GRASS (*Aristida* sp.).

Xanthium spp. (COCKLEBURS).

YELLOW BRISTLE GRASS (*Setaria lutescens*).

Kingsbury, J. M. 1964. *Poisonous Plants of the United States and Canada*. Prentice-Hall, Inc., Englewood Cliffs, NJ.

Muenscher, W. C. 1970. *Poisonous Plants of the United States*. The MacMillan Company, New York.

Ruhr, L. P. 1986. Ornamental toxic plants. In: *Current Veterinary Therapy IX: Small Animal Practice*. W.B. Saunders Company, Philadelphia, PA, pp. 216-220.

Plants Suitable For Herp Habitats

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From: Reptiles: A Teacher's Guide to their Care and Keeping in the Classroom.
Master's Thesis, Sonoma State University, Rohnert Park CA

This is by no means a comprehensive list of all the possible plants you can use in an enclosure. The following lists of plants have been found in two or more herpetoculture books or articles.

The appearance of plants on this list does not necessarily mean that they are not toxic to all reptiles. Many of the following recommendations are based on the knowledge that the animals typically housed in such environments will or will not eat them. If considering other plants, or using any of the following plants in for animals not usually associated with those habitats, please cross-check them against the Harmful/Toxic Plants and Edible Plants lists and other safe and toxic resources available on- and off-line.

Desert Plants

Depending on the width of the enclosure, install at least 2-6 fluorescent tubes, running the length of the enclosure.. Use UVB-producing fluorescents if required by the reptiles in the enclosure; otherwise, you can use plant grow lights. If using a mixture of the two, remember to replace the UVB tubes annually and to place them nearest to the reptile's basking and lounging spots.

The following are suitable for architectural and topographical interest but are generally not suitable as basking and perching plants.

Snake plants (*Sanseveria* sp.)

- S. aethiopica
- S. caniculata
- S. kirkii pulchra
- S. parva
- S. pinguicula
- S. sinularis
- S. thyrsoflora
- S. trifasciata

Caudiciforms (caudex refers to the stem which stores water for the plant) such as Aloes:

- Dwarf Aloe (*Aloe variegata*, *A. jucunda*)
- Climbing Aloe (*Aloe ciliaris*)
- Lace Aloe (*Aloe aristata*)
- Bromeliads (except species with spines)
- Caudexed Figs* (*Ficus petiolaris*, *F. palmeri*)
- Ceropegias vines
- Cow- or Oxtongue, Bowtie (*Gasteria*) - cut off any sharp tips
- Elephant Trees (*Bursera*)
- Gasterhaworthia* "Royal Highness"
- Geraniums (*Pelargonium*)
- Grapes (*Cissus* and *Cyphostema*)
- Haworthias
- Ponytail Palms (*Beaucarnea recurvata*)
- Thornless cacti

Tillandsia (Air plants; Spanish Moss; Air Moss)

There are two primary forms the 500 or so species of this type of bromeliad. Before buying any Tillandsia, make sure it is a form that will grow well in the environment into which you are planning to put it.

While most Tillandsia are found growing on trees or rocks, some are also found in desert regions. Some, those with green leaves and a root formation but no scales, may be grown as epiphytes or can be planted in soil. Some of these species include:

T. anceps
T. brachycaulos
T. cyanea
T. lineniana

Others are strictly epiphytes ("air plant"), noted by their dense covering of grey scales and generally without roots. These are the ones that can be grown on rough tree trunks, the joints of branches, and in or on other structures and artifacts. They need bright light and frequent spraying with water or periodic soaking in water. Epiphyte forms include:

T. bulbosa
T. lonantha
T. usneoides

Temperate and Tropical Plants

Depending on the width of the enclosure, at least 2-4 plant lights should be installed, running the length of the enclosure. Use UVB-producing fluorescents if required by the reptiles in the enclosure; otherwise, you can use plant grow lights. If using a mixture of the two, remember to replace the UVB tubes annually and place the UVB lights closest to the reptile's basking and lounging spots.

Most of these plants fare well in daytime temperatures in the mid-80s (29-30 C), and can tolerate nighttime drops into the mid-60s (18-19 C).

Bromeliads (Aechmea, Billbergia, Guzmania, Neoregelia) - clip spines
Chinese Evergreen (Aglaonema commutatum)
Creeping Fig* (Ficus pumila)
Corn Plant (Draceneas - until they outgrow enclosure)
Dwarf Schefflera (Brassaia actinophylla)
Earth Stars (Cryptanthus)
Gesneriads (Aeschynanthus, Nematanthus)
Orchids (Dendrobium, Epidendrum, Haemaria, Oncidium)
Peacock Plant (Calathea stromata; Marantaceae)
Peperomia (Peperomia obtusifolia, Piperaceae)
Ponytail Palms (Beaucarnea recurvata)
Pothos (Scindapsus aureus, Epipremnum aureum)
Rosary Vine (Ceropegia woodii)
Sanseveria trifasciata, including the following cultivars: Bentel's Sensation, Laurenti, Moonshine, Gray Lady.
Sanseveria parva, including cultivars: Hahnii, Hahnii "Loop's Pride", Hahnii Silver Frost, Golden Hahnii.
Virginia Creeper (Parthenocissus inserta)
Virginia Spiderwort* Tradescantia virginiana
Wandering Jew* Tradescantia zebrina
Weeping Figs* (Ficus benjamina)

* = There has been some concern expressed about the milky sap that oozes from broken leaves and twiglets of the various Ficus species. The sap may be an eye/skin irritant to the animal that brushes up against it and gets it in their eyes (as may happen by accident in passing or when rubbing the eyelid against it as it gets ready to shed).

Aquatic Plants

Turtles are more destructive to plants than are fish. Turtles use plants as food, to hide in, and to swim through. They bang into them with considerably more impact than your usual aquarium fish. Water plants help increase the oxygen content of the water as well as lower the level of nitrates. The following aquatic plants are considered hardy for use in aquatic and semi-aquatic turtle enclosures.

Temperate

Arrowhead (*Sagittaria subolata*)
Canadian Pondweed (*Elodea canadensis*)
Common Eel Grass (*Vallisneria spiralis*)
Crystalwort (*Riccia fluitans*)
Hair Grass (*Eleocharis acicularis*)
Java Fern (*Microsorium pteropus*)
Java Moss (*Vesicularia dubyana*)
Water Hyacinth (*Eichornia* sp.)
Water Lettuce (*Pistia stratiotes*)
Water Trumpet (*Cryptocoryne ciliata*, *C. nevillei*)

Tropical

Canadian Pondweed (*Elodea canadensis*)
Water Hyacinth (*Eichornia* sp.)
Water Lettuce (*Pistia stratiotes*)
Water Trumpet (*Cryptocoryne cordata*)

Brackish

Arrowhead (*Sagittaria subolata*)
Canadian Pondweed (*Elodea canadensis*)
Crystalwort (*Riccia fluitans*)
Java Moss (*Vesicularia dubyana*)
Water Trumpet (*Cryptocoryne ciliata*, *C. nevillei*)

Edible Plants List

Compiled by Melissa Kaplan 1996, updated in 2001

The following list of plants has been compiled from a wide variety of sources as being safely edible, at least in small amounts, by reptiles. The best source for identifying weeds and finding out if they are safe or not is to get one of the many field guides to edible plants such as Thomas S. Elias and Peter A. Dykeman's *Edible Wild Plants: A North American Field Guide* (Sterling Publishing Co., Inc., New York, NY. 266 p. ISBN 0-8069-7488-5). Many junior colleges and university extension programs, and some parks departments and nature centers, offer short courses or day-hike series by naturalists or botanists that explore the edible wild plants growing in your area. Taking such a course can be invaluable if you have trouble translating the photos and text descriptions from books into what you see growing around you.

Keep in mind that even if you do not use pesticides, herbicides, or fertilizers in your yard, if your neighbors do, or their neighbors do, some is bound to end up in your yard. Many plants purchased from nurseries and stores have been treated with topical pesticides, herbicides and the soils with fertilizers. They should be washed and repotted before using. Plants, Pesticides, and Herps discusses this a bit. You also might want to think twice about feeding cut flowers you buy from florists in case they have been sprayed or stored in something that may not agree with reptilian constitutions.

Also keep in mind that, as with lists of toxic plants, no listing of edible plants will ever be complete. It is for that reason that you will find links to other plant sites for you to use if you do not find the plant you are looking for on the toxic, harmful or edible lists at my site.

Another important point to keep in mind: Just because a little bit is okay, a lot may not be, so always feed edible ornamentals in moderation and watch your pet carefully for any signs that the plant has disagreed with it. Possible signs include decreased or increased activity, increased salivation, mouth or face rubbing, diarrhea or other change in feces and urates, changes in respiration rate, labored breathing, rapid weight loss, increase water consumption. If any of these changes are observed, get your reptile to a reptile vet and be sure to let her or him know what your reptile has or may have been eating and if there is a possibility of chemical contamination of the plant.

Anytime you are talking about an ornamental or other plant that is not commonly eaten by humans or farm animals, all bets are off when it comes to short- and long-term safety. While we may know - grossly - that a plant is not outright toxic (kills the consumer within a short period of time after ingestion), that doesn't mean that it is completely benign. The reason why plants that don't kill outright eventually appear on toxic lists is because some vet or researcher somewhere got intrigued by what he or she saw in their practice and figured out that certain plants cause certain reactions in some or potentially all species. Because there are so many variables on the individual level (animal size, how much it already ate of its usual diet, core body temperature, how much it has had to drink, the age of the plant eaten, the season of year the plant was eaten, the plant part eaten, how healthy the animal is, whether there is already some liver or other organ dysfunction, etc.), as well as at the species level and between individuals within a population of a species, there are no absolutes or certainties. So, save "safe" plants for occasional treats in small amounts, rather than feeding them daily or in large amounts.

Another source for information on edible plants is the Plants for a Future website, where you can access the UK database or the US mirror site.

ASTILBE (*Astilbe* spp.)²

BABY'S TEARS (*Soleirolia soleirolia*)²

CHINESE LANTERN (*Abutilon hybridum*): flowers

CARNATIONS (*Dianthus*) (PINKS): petals1

DAHLIA: flowerhead

DANDELION (*Taraxacum officinale*): leaves, flowerhead

DAY LILIES (*Hemerocallis* sp.): flowers

DRACAENA spp. cornplant

FICUS (*Ficus benjamina*): leaves

GERANIUM (*Pelargonium* sp.): flowers, leaves. Other names include: Carolina cranesbill; *Geranium carolinianum*.

GRAPE (not ornamental grape ivys *Cissus* sp.): leaves, fruit

HENS AND CHICKS (*Echeveria* spp.)2

HENS AND CHICKENS (*Sempervivum tectorum*)2

IMPATIENS (*Impatiens* sp.)2

JOHNNY-JUMP-UP (*V. tricolor* sp.): flowers

HIBISCUS, tropical (*Hibiscus rosa-sinensis*; Chinese hibiscus; shoebackplant): flowers, leaves. Blue Hibiscus (*Alyogyne huegelii*): flowers

Hollyhock (*Alcea rosea*): leaves, flowers3

KUDZU (*Pueraria phaseoloides*, *P. thunbergiana*, Fanko Puero): edible by humans, goats and cows; uncertain at this time of potentially harmful phytochemicals which may prohibit or limit intake. If fed, do so sparingly and observe effects

MAPLE (*Acer* sp.): leaves have been eaten with no apparent consequences

MESQUITE (*Prosopis glandulosa torreyana* (*P. chilensis*)): leaves

MULBERRY (*Morus alba*): leaves

NASTURTIUM (*Tropaeolum majus*): flowers, leaves

PANSIES (*V. tricolor hortensis* (*V. wittrockiana*)): flowers; (*Chlorophytum comosum*): leaves2

PEA, GREEN BEAN (not sweetpea): leaves, pods

PETUNIA (*Petunia hybrida*)2

PHLOX (*Phlox paniculata*)2

PINKS (*Dianthus*): petals1

POTHOS (*Epipremnum pothos aureus* (*Epipremnum aureum*): leaves*

ROSE (*Rosa* sp.): petals

SPIDER PLANT (*Tradescantia cussonia specata*): leaves (sap may be a skin irritant)

SPLIT-LEAF PHILODENDRON (*Monstera*): leaves - known safe for prehensile-tailed skinks*

SQUASH / ZUCCHINI (*Cucurbita* sp.): flowers

VIOLETS (*Viola* spp, not African violets *Saintpaulia ionantha*) (PARMA VIOLET *V. alba*; VIOLA, TUFTED PANSY *V. cornuta*; AUSTRALIAN VIOLET *V. hederacea*; SWEET VIOLET *V. odorata*; CONFEDERATE VIOLET *V. preceana* (*V. sororia*); JOHNNY JUMP UP *V. tricolor*; PANSY *V. tricolor hortensis* (*V. wittrockiana*): flowers, leaves - known safe for tortoises

WANDERING JEW (*Zebrina* spp; *Tradescantia zebrina*): leaves (sap may be an skin irritant)

YUCCA (SPANISH BAYONET *Y. Aloigolia*; DATIL YUCCA *Y. baccata*; JOSHUA TREE *Y. brevifolia*; SOAPTREE YUCCA *Y. elata*; SPANISH DAGGER, SMALL SOAPWEED *Y. glauca*; SOFT TIP YUCCA *Y. gloriosa*; TORREY TUCCA *Y. torreyi*; OUR LORD'S CANDLE *Y. whipplei*; *Y. elephantipes* (*Y. gigantea*); *Y. tilamentosa*; *Y. flaccida*; *Y. harrimania*; *Y. recurvifolia* (*Y. pendula*); *Y. schidigera* (*Y. mohavensis*); *Y. schottii* (*Y. macrocarpa*): flowers

* ... high in oxalic acid - pothos may be offered to iguanas only in moderation

Sources:

a ... Anecdotal as reported by reptile keepers.

1... Campin, Jack. Plant Relationships (for food allergy and intolerance identification)

2... University of California (Davis) Safe and Toxic Plants - An excellent site to look up plants you don't find on any of my Edible or Harmful/Toxic lists!

3... Plants for a Future

Harmful & Toxic Plants

Compiled by Melissa Kaplan

These plants are in addition to those found in Susan Barnard's Harmful & Poisonous Plants listing

The following plants have been found on other toxic plant lists or I have found them referred to in various types of literature. I myself will not permit my herbivores to eat them.

BOUGAINVILLEA glabra 1.

CAPSICUM spp. Peppers, Sweet Peppers, Bell Peppers. Leaves contain solamin and atropine.

CHRYSANTHEMUM. These are the plants from which the pesticide pyrethrin is extracted.

CRASSULA ARGENTEA Jade Plant. Mildly toxic; dermatitis from sap1.

JADE PLANT Crassula argentea. Mildly toxic; dermatitis from sap1.

RUBBER PLANT Ficus elastica. Dermatitis from sap1.

FICUS ELASTICA Rubber plant. Dermatitis from sap1.

Didn't find what you are looking for?

The following sites may be useful to people looking for additional information on plants. It should be noted that the information at these sites is not necessarily applicable to your reptiles.

The U.S. Food & Drug Administration's Center for Food Safety & Nutrition also has a Poisonous Plant List. <http://vm.cfsan.fda.gov/%7Edjw/plantnam.html>

Plants for a Future is a listing of edible and otherwise usable plants. http://www.ibiblio.org/pfaf/D_search.html

I've not fully explored this site but it does seem to have pictures of the plants and is accessed by common or scientific name. It is part of the University of Illinois' Toxic Plants for Animals database (<http://www.library.uiuc.edu/vex/toxic/toxic.htm>) for its veterinary students. The U of I is where the National Animal Poison Control Center (NAPCC) is located. <http://www.aspc.org/site/PageServer?pagename=apcc>

The University of California, Davis, also has an extensive site of safe and toxic plants (be sure to scroll down to the bottom of their page for the link to the toxic database). <http://envhort.ucdavis.edu/ce/king/PoisPlant/SAFE-COM.htm>

The USDA's Agricultural Research Service's Phytochemical & Ethnobotanical Database doesn't have all plants, and won't provide lists of toxic or safe plants, but you can look up many plants to find out what chemicals they have, or look up chemicals and see which plants have them. <http://www.ars-grin.gov/duke/>

The Guide to Plant Relationships is actually an informal guide for people who have allergies to one type of plant to find out what related plants they may need to avoid. It comes in handy now and then for herpers researching plant-related information. <http://www.purr.demon.co.uk/Food/RelatedPlantList.html>

The USDA's Searchable Nutrient Database lists the basics - water, kcal, protein, fat, carbs, vitamins, and minerals for plant foods. The listings are only for foods commonly eaten by humans (so you will not find things like hibiscus flowers on it) and does not include information on potentially harmful chemicals/compounds such as calcium oxalates. http://www.nal.usda.gov/fnic/cgi-bin/nut_search.pl

Wegman's Produce also has a site with information and pictures of many of the things you are likely to find in your grocer's produce section (or would, if you asked them to stock it). <http://www.wegmans.com/kitchen/ingredients/produce/index.asp>

Finally, I strongly recommend the use of a meta-search engine in which you can search for exact phrases as well as indicate "AND" and "OR" using Boolean or other operators. My preference over the web-based search engines is Copernic. <http://www.copernic.com>