



Poisonous Plants in the Home and Landscape¹

Prepared for Upper Midwest Master Gardener Conference 2010
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Plants Grouped According to their Primary Toxins

Alkaloids		
Genus	Common Name	General Effect
Aconitum spp.	Monk's hood, aconite	Vomiting, death
Albizia spp.	Mimosa tree	Neurologic signs
Aleurites spp.	Tung nut	Gastroenteritis
Amaryllis belladonna	Amaryllis, naked lady	Vomiting, diarrhea
Atropa belladonna	Deadly nightshade	Tachycardia, mydriasis
Baptisia spp.	Indigo	Muscle tremors, vomiting
Brugmansia spp.	Angel's trumpet	Tachycardia, respiratory failure
Brunfelsia spp.	Yesterday-today-tomorrow	Seizures, vomiting
Buxus spp.	Boxwood	Vomiting, diarrhea
Calycanthus spp.	Sweet shrub, allspice	Muscle tremors, seizures
Cassia spp.	Golden shower tree	Gastroenteritis
Catharanthus spp.	Periwinkle	Neurotoxic, hypotension
Celastrus spp.	American bittersweet	Vomiting, diarrhea
Cestrum spp.	Cestrum, jasmine	Hepatotoxicity, calcinosis
Colchicum spp.	Autumn crocus	Gastroenteritis, shock
Conium maculatum	European, spotted hemlock	Neurotoxic, teratogenic
Corydalis spp.	Fitweed, corydalis	Vomiting, muscle tremors
Crinum spp.	Crinum lily	Vomiting, diarrhea, hypotensive
Datura spp.	Sacred datura, Jimson weed	Respiratory failure, hallucinations
Dicentra spp.	Bleeding heart	Vomiting, muscle tremors
Erythrina spp.	Coral bean	Muscle paralysis
Euonymus spp.	Burning bush	Gastroenteritis, cardiac dysrhythmias
Galanthus spp.	Snow drop	Vomiting, diarrhea
Gelsemium spp.	Carolina jessamine	Neurotoxic, death
Gloriosa superba	Glory Lily	Gastroenteritis, shock
Haemanthus spp.	Blood Lily	Vomiting, diarrhea, seizures
Heliotropium spp.	Heliotrope	Liver failure
Hippeastrum spp.	Amaryllis lily	Vomiting, diarrhea
Hymenocallis spp.	Spider Lily, Peruvian Daffodil	Gastroenteritis
Hyoscyamus spp.	Black henbane	Tachycardia, respiratory failure
Ilex spp.	Holly	Gastroenteritis
Ipomoea spp.	Morning Glory	Neurologic abnormalities
Laburnum spp.	Golden chain tree	Vomiting, tachycardia
Ligularia spp.	Ligularia	Liver failure
Lobelia spp.	Cardinal Flower	Vomiting, cardiotoxicity
Mirabilis spp.	Four O'Clocks	Gastroenteritis
Nandina Domestica	Heavenly Bamboo	Seizures, respiratory failure
Narcissus spp.	Daffodils, Narcissus	Vomiting, diarrhea

¹ Material excerpted from: "A Guide to Poisonous House and Garden Plants", and reprinted with permission from author: Anthony P. Knight, BVSC, MS, DACVIM, Professor Department of Clinical Sciences, College of Veterinary Medicine and Biomedical Sciences, Colorado State University
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Alkaloids continued . . .

Genus	Common Name	General Effect
Nerine spp.	Nerine, or Spider Lily	Vomiting, diarrhea
Nicotiana spp.	Tabacco	Seizures, respiratory failure
Papaver spp.	Poppy	Excitement, depression
Physalis spp.	Ground Cherry	Vomiting, colic
Sanguinaria Canadensis	Blood Root	Vomiting, colic
Senecio (Packera) spp.	Senecio, groundsel	Liver failure
Solandra spp.	Chalice Vine	Respiratory failure, hallucinations
Solanum Pseudocapsicum	Jerusalem Cherry	Vomiting, respiratory failure
Sophora spp.	Mescal Bean	Neurologic signs, ataxia
Sprekelia spp.	Maltese Cross Lily	Vomiting, diarrhea, ataxia
Symphytum spp.	Comfrey	Liver failure
Taxus spp.	Yew	Cardiac dysrhythmias, death
Theobroma Cocoa	Cocoa	Vomiting, diarrhea, neurologic signs
Zephyranthes spp.	Atamasco or Rain Lily	Vomiting, gastroenteritis

Cannabinoids

Genus	Common Name	General Effects
Cannabis sativa	Marijuana, hemp	Neurologic signs

Amino Acids

Genus	Common Name	General Effects
Mimosa spp.	Sensitive Plant	Hair loss, hyperthyroidism
Zamia spp.	Sago Plant	Neurologic signs

Toxalbumins (Lectins), Proteins

Genus	Common Name	General Effects
Abrus Precatorius	Rosary Pea	Enteritis, shock, death
Blighia Sapida	Akee	Hypoglycemia, seizures
Hyacinthus app.	Hyacinth	Gastroenteritis, death
Jatropha spp.	Physic Nut, Coral Plant	Gastrointestinal irritation
Phoradendron spp.	Mistletoe	Gastrointestinal irritation
Ricinus Communis	Castor Bean	Gastroenteritis, shock, death
Robinia spp.	Black Locust	Gastroenteritis, shock
Tulipa spp.	Tulip	Gastroenteritis, death
Wisteria spp.	Wisteria	Gastrointestinal irritation

Oxalates

Genus	Common Name	General Effects
Aglaonema spp.	Chinese Evergreen	Salivation, oral edema
Alocasia spp.	Elephant's Ear	Salivation, oral edema
Anthurium spp.	Flamigo Flower	Salivation, oral edema
Arum spp.	Arum	Salivation, oral edema
Begonia spp.	Begonia	Salivation, oral edema
Caladium spp.	Caladium	Salivation, oral edema
Calla Palustris	Water Arum	Salivation, oral edema
Caryota spp.	Fish Tail Palm	Salivation, oral edema
Colocasia spp.	Elephant's Ears, Taro	Salivation, oral edema
Dieffenbachia spp.	Dumb Cane	Salivation, oral edema
Epipremnum spp.	Pothos	Salivation, oral edema
Monstera spp.	Ceriman, Swiss Cheese Plant	Salivation, oral edema
Narcissus spp.	Daffodils, Narcissus	Salivation, oral edema
Oxalis spp.	Oxalis, Sorrel	Salivation, hypocalcemia
Parthenocissus spp.	Virginia Creeper	Vomiting, diarrhea
Philodendron spp.	Philodendron	Salivation, oral edema
Phytolacca American	Pokeberry	Gastroenteritis
Pistia Stratiotes	Water Lettuce	Salivation, oral edema

Oxalates continued . . .

Genus	Common Name	General Effects
Portulaca spp.	Moss Rose	Salivation, vomiting
Spathiphyllum spp.	Peace Lily	Salivation, oral edema
Syngonium spp.	Arrow Head Vine	Salivation, oral edema
Zantedeschia spp.	Calla, Arum Lily	Salivation, oral edema

Glycosides

Genus	Common Name	General Effects
Acocanthera spp.	Bushman's Poison	Dysrhythmias, death
Actea spp.	Bane Berry	Gastroenteritis
Adenium Obesum	Desert Rose	Cardiac dysrhythmias
Adonis spp.	Adonis, Pheasant's Eye	Cardiac dysrhythmias, enteritis
Aesculus spp.	Buckeye, Horse Chestnut	Vomiting, diarrhea, neurologic signs
Aloe spp.	Aloe	Diarrhea
Anemone spp.	Anemone	Gastroenteritis
Asclepias spp.	Milkweed	Cardiac dysrhythmias, neurotoxicity
Aucuba spp.	Aucuba, Gold Dust Tree	Vomiting, gastroenteritis
Bowiea spp.	Climbing Onion	Cardiac dysrhythmias
Calotropis spp.	Crown Flower	Cardiac dysrhythmias, neurotoxicity
Caltha spp.	Marsh Marigold	Gastroenteritis
Clematis spp.	Clematis	Gastroenteritis, diarrhea
Convallaria Majalis	Lily of the Valley	Cardiac dysrhythmias, enteritis
Coriaria spp.	Coriaria	Gastroenteritis, neurotoxic
Crassula spp.	Jade Plant	Cardiac dysrhythmias, gastroenteritis
Cryptostegia spp.	Rubber Vine	Gastroenteritis
Cycas spp.	Cycad, Sago Palm	Liver necrosis, neurotoxicity
Digitalis spp.	Fox Glove	Cardiac dysrhythmias, gastroenteritis
Erobotrya spp.	Loquat	Cyanosis, respiratory failure, death
Euonymus spp.	Burning Bush	Gastroenteritis, cardiac dysrhythmias
Helleborus spp.	Christmas Rose, Hellebore	Gastroenteritis, cardiac dysrhythmias
Hoya spp.	Wax Plant	Cardiac dysrhythmias
Hyacinthoides spp.	English Bluebell	Cardiac dysrhythmias, gastroenteritis
Hyacinthus spp.	Hyacinth	Vomiting, diarrhea
Hydrangea spp.	Hydrangea	Cyanosis, respiratory failure, death
Kalanchoe spp.	Kalanchoe	Cardiac dysrhythmias, gastroenteritis
Nandina Domestica	Heavenly Bamboo	Cyanosis, respiratory failure, death
Nerium Oleander	Oleander	Cardiac dysrhythmias, death
Ornithogallum spp.	Star of Bethlehem	Cardiac dysrhythmias
Podophylum spp.	May Apple	Gastroenteritis, neurologic signs
Prunus spp.	Choke Cherry	Cyanosis, respiratory failure, death
Pyracantha Coccinea	Pyracantha	Cyanosis, respiratory failure
Ranunculus spp.	Buttercups	Gastroenteritis
Scilla spp.	Scilla, Squill	Gastroenteritis, cardiac dysrhythmias
Thalictrum spp.	Meadow Rue	Gastroenteritis
Thevetia spp.	Yellow Oleander	Cardiac dysrhythmias, death
Zamia spp.	Sago Palm	Liver necrosis

Saponins/Sapogenins

Genus	Common Name	General Effects
Aesculus spp.	Buckeye, Horse Chestnut	Gastroenteritis
Agapanthus spp.	Blue Lily	Gastroenteritis
Agave Lecheguilla	Agave	Cholecystitis, biliary obstruction
Asparagus spp.	Asparagus	Gastroenteritis
Cyclamen spp.	Cyclamen	Gastroenteritis, cardiac dysrhythmias
Dracaena spp.	Dracaena, Corn Plant	Gastroenteritis
Gymnocladus spp.	Kentucky Coffee Tree	Gastroenteritis
Hosta spp.	Hosta	Gastroenteritis

Saponins/Sapogenins continued . . .

Genus	Common Name	General Effects
Pedilanthus spp.	Slipper Flower	Gastroenteritis
Phytolacca Americana	Pokeberry	Gastroenteritis
Pittosporum spp.	Pittosporum	Gastroenteritis
Schefflera spp.	Umbrella Tree	Gastroenteritis
Sesbania spp.	Rattlebush, Coffee Bean	Gastroenteritis
Yucca spp.	Yucca	Cholecystitis, biliary obstruction

Terpenoids

Genus	Common Name	General Effects
Acalypha spp.	Chenille Plant, Copper Leaf	Gastroenteritis, dermatitis
Achillea spp.	Yarrow	Gastroenteritis
Caesalpinia spp.	Peacock Flower	Gastrointestinal irritation
Capsicum spp.	Peppers	Gastrointestinal irritation
Daphne spp.	Daphne	Gastrointestinal irritation
Delphinium spp.	Larkspur	Neuromuscular paralysis
Euphorbia spp.	Euphorbias	Stomatitis, vomiting
Hedera spp.	Ivy	Gastrointestinal irritation
Iris spp.	Iris	Gastrointestinal irritation
Kalmia spp.	Laurel	Vomiting, cardiac dysrhythmias
Lantana spp.	Lantana	Cholecystitis/stasis
Leucothoe spp.	Fetterbush	Vomiting cardiac dysrhythmias
Ligustrum spp.	Privet	Vomiting cardiac dysrhythmias
Lonicera spp.	Honesuckly	Vomiting, diarrhea
Lyonia spp.	Staggerbush, Maleberry	Vomiting, cardiac dysrhythmias
Melaleuca spp.	Melaleuca, Tea Tree	Neurologic signs
Melia Azadarach	Chinaberry	Vomiting, diarrhea, ataxia
Momordica spp.	Balsam Pear	Vomiting, diarrhea
Nepeta Cataria	Catnip	Abnormal behavior, hallucinations
Pieris spp.	Pieris	Vomiting, cardiac dysrhythmias
Plumeria spp.	Plumeria	Vomiting, diarrhea
Sambucus spp.	Elderberry	Gastrointestinal irritation
Sapindus spp.	Soapberry	Gastrointestinal irritation
Schefflera spp.	Umbrella Tree	Salivation, gastroenteritis
Schinus spp.	Pepper Tree	Dermatitis, vomiting

Sulfoxides and Other Oxidants

Genus	Common Name	General Effects
Acer Rubrum	Red Maple	Heinz body anemia, death
Allium Species	Onions	Heinz body anemia

Glucosinolates

Genus	Common Name	General Effects
Armoracia Rusticana	Horse Raddish	Gastrointestinal irritant

Naphthaquinone

Genus	Common Name	General Effects
Juglans Nigra	Black Walnut	Laminits

Acetylenic Alcohols (unsaturated)

Genus	Common Name	General Effects
Cicuta spp.	Water Hemlock	Paralysis, cardiomyopathy

Ketone Benzofurans

Genus	Common Name	General Effects
Eupatorium spp.	White Snake Root	Muscle tremors, cardiomyopathy

Poisonous Fruits and Seeds of Common Garden Plants

Common Name	Genus/Species	Toxin Class	Clinical Effect
Acorn	Quercus spp.	Gallotannins	Kidney Failure
Akee	Blighia sapida	Amino acid Hypoglycin	Gastroenteritis
Arum	Calla spp.	Oxalates	Kidney Failure
Asparagus	Asparagus	Saponins	Gastroenteritis
Balsam Pear	Momordica charantia	Cucurbitane terpenoids	Gastroenteritis
Baneberry	Actaea spp.	Ranunculin, protoanemonins	Gastroenteritis
Belladonna	Atropa belladonna	Tropane alkaloids	Respiratory Failure
Bitter Sweet	Celastrus scandens	Cardenolides	Gastroenteritis
Black Henbane	Hyoscyamus niger	Tropane alkaloids	Respiratory Failure
Blue Cohosh	Caulophyllum thalictroides	Glycoside	Gastroenteritis
Box	Buxus spp.	Steroid alkaloids	Gastroenteritis
Buckeye	Aesculus spp.	Glycosides - esculine, escin	Vomiting, seizures
Buckthorn	Rhamnus spp.	Cascarocide glycosides	Purgation
Buddist Pine	Podocarpus spp.	(Unknown)	Gastroenteritis
Candle Nut	Aleurites spp.	Diterpene alkaloids	Gastroenteritis
Castor Bean	Ricinus Communis	Lectins (toxalbumins)	Gastroenteritis
Chili Peppers	Capsicum spp.	Capsaicin	Gastroenteritis
Clivia	Clivia spp.	Oxalates	Kidney Failure
Chinaberry	Melia azadarach	Triterpenes-meliatoxins	Gastroenteritis
Chinese Lantern	Physalis spp.	Solanine glycoalkaloids	Respiratory Failure
Cocklebur	Santhium spp.	Carboxyatractyloside	Liver Failure
Coontie	Zamia spp.	Glycosides-cycasin	Liver Failure
Coral Tree	Erythrina spp.	Isoquinolone alkaloids	Muscle Weakness
Coyotillo	Karwinskia humboldtiana	Glycosides	Gastroenteritis
Cycad	Cycas spp.	Glycosides-cycasin	Liver Disease
Daphne	Daphne mezereum	Diterpene alkaloids	Gastroenteritis
Deadly Nightshade	Atropa belladonna	Tropane glycoalkaloids	Respiratory Failure
English Ivy	Hedera spp.	Terpenoids	Gastroenteritis
Heavenly Bamboo	Nandina domestica	Cyanogenic glycosides	Respiratory Failure
Holly	Ilex spp.	Methylxanthines, saponins	Gastroenteritis
Honey Suckle	Lonicera spp.	Terpenoids	Gastroenteritis
Jack in the Pulpit	Arisaema spp.	Oxalates	Kidney Failure
Jerusalem Cherry	Solanum pseudocapsicum	Tropane alkaloids	Respiratory Failure
Jessamine	Cestrum spp.	Vitamin D analogue	Tissue Calcification
Jimson Weed	Datura spp.	Tropane alkaloids	Respiratory Failure
Kentucky Coffee Tree	Gymnocladus dioicea	Glycosides	Gastroenteritis
Lantana	Lantana spp.	Triterpenoids, lantadenes	Cholecystitis
Lily of the Valley	Convallaria Majalis	Cardenolides	Cardiac Failure
Loquat	Eryiobotria japonica	Cyanogenic glycosides	Respiratory Failure
Manchineel	Hippomane mancinella	Diterpene alkaloids	Gastroenteritis
May Apple	Podophyllum	Podophyllotoxin	Gastroenteritis
Mescal Bean	Sophora secundiflora	Quinolizidine alkaloids	Neurotoxic
Mistletoe	Phoradendron spp.	Glycoprotein lectins	Gastroenteritis
Moonseed	Menispermum canadense	Alkaloids	Gastroenteritis, seizures
Morning Glory	Ipomoea spp.	Indole alkaloids	Hallucinations
Pepper Tree	Schinus spp.	Terpenes	Gastroenteritis
Physic, Purge Nut	Jatropha spp.	Diterpenoids	Gastroenteritis
Pigeon Berry	Duranta repens	Monoterpenoids	Gastroenteritis
Pokeberry	Phytolacca americana	Saponins, oxalates	Gastroenteritis
Poison Wood	Metopium toxiferum	Catechols	Dermatitis
Privet	Ligustrum spp.	Terpenoids	Gastroenteritis
Rattlepod	Crotalaria spp.	Pyrrrolizidine alkaloids	Liver Failure
Rosary Pea	Abrus prectorius	Lectins (toxalbumins)	Gastroenteritis
Scotch Broom	Cytissus spp.	Quinolizidine alkaloids	Neurotoxic, emesis

Poisonous Fruits and Seeds of Common Garden Plants continued . . .

Common Name	Genus/Species	Toxin Class	Clinical Effect
Snow Berry	Symphoricarpos spp.	Alkaloids	Gastroenteritis
Soap Berry	Sapindus spp.	Saponins	Gastroenteritis
Strawberry Bush	Euonymous spp.	Cardenolides	Gastroenteritis
Sweet Pea	Lathyrus spp.	Lathrogenic aminoacids	Neural degeneration
Virginia Creeper	Parthenocissus quinquefolia	Oxalates	Kidney Failure
Woody Nightshade	Solanum dulcamara	Tropane glycoalkaloids	Gastroenteritis
Yellow Oleander	Thevetia peruviana	Cardenolides	Cardiac Failure
Yew	Taxus spp.	Taxine	Cardiac Failure

Frequency of Reported Human Plant Exposures

Poisonous Plants Most Commonly Ingested

Genus	Common Name-Exposures	Genus	Common Name
Spathiphyllum	Peace lily 3,602	Capsicum	Pepper
Philodendron	Philodendron 2,880	Dieffenbachia	Dumb Cane
Euphorbia pulcherrima	Poinsettia 2,620	Philodendron	Philodendron
Ilex	Holly 2,427	Caladium	Caladium
Phytolacca	Pokeweed 1,863	Spathiphyllum	Peace Lily
Ficus	Fig 1,613	Datura	Jimson Weed
Toxicodendron	Poison ivy/oak 1,500	Euphorbia	Spurge
Dieffenbachia	Dumb cane 1,324	Ficus	Fig
Crassula	Jade plant 1,146	Narcissus	Daffodil
Epipremnum	Pothos 1,083	Phytolacca	Ink Berry
Capsicum annum	Chili pepper 1,049	Zantedeschia	Calla Lily
Rhododendron	Axalea, rhododendron 1,047	Ilex	Holly
Chrysanthemum	Chrysanthemum 869	Iris	Iris
Nerium oleander	Oleander 847	Epipremnum	Pothos
Schlumbergera bridges	Christmas cactus 841	Eucalyptus	Eucalyptus
Hedera helix	Ivy 769	Ephedra	Mormon Tea
Eucalyptus	Eucalyptus 727	Hedera	Ivy
Malus*	Apple 703	Arisaema	Jack in the Pulpit
Nandina domestica	Heavenly bamboo 694	Piper Nigrum	Black Pepper
Saintpaulia ionantha	African violet 685	Begonia	Begonia

***Minimally or not toxic**

Table compiled from Watson WA et al: 2002 Annual Report of the American Assoc. of Poison Control Centers Toxic Exposure Surveillance System. Am J Emergency Medicine 2003, 21:353-421

Table compiled from: Mrvos R. Krenzelok EP, Jacobsen TD: Toxidromes Associated with the most Common Plant Ingestions. Vet Human Toxicol 2001, 43:366-369

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Jack in the Pulpit