Poisonous plants
around the home

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Introduction

Some of the many plants used for beautification in and around Florida homes are toxic if eaten; some are irritating if they come into contact with the skin. Under normal circumstances no adult would think of eating these ornamental plants, but sometimes they are ingested accidentally or swallowed thoughtlessly by children. Such alarming symptoms may follow that a physician is needed. The doctor can treat the trouble symptomatically and, in most cases, this will prove entirely sufficient so that the incident ends happily. Touching certain plants can result in an irritation of the skin similar to ivy poisoning, at least for certain susceptible individuals.

The purpose of this bulletin is twofold: first, to enable citizens to recognize which common plants can cause poisoning or dermatitis; and second, to assist physicians in adjusting treatment to the specific substance involved when cases of plant poisoning come to their attention.

Many gardeners and home owners are not aware that some of our common garden plants contain highly poisonous substances. Most of these plants have such an unpleasant taste or consistency that it is not likely anyone would chew them very long or swallow any part of them. Some of them, however, do not taste bad and hence might be chewed and swallowed inadvertently.

These remarks hold true for adults, but the situation with regard to children is very different. Youngsters may eat small amounts of almost anything, especially if a dare is involved. Small children often chew on anything that happens to be available. Even crawlers in a playpen may reach out between the bars and pull in anything within reach. Grass and most lawn weeds are harmless but poisonous mushrooms may grow in such areas. Playpens set out-of-doors should always be placed in an area that has been examined and cleared of dangerous items.

As soon as possible, children should be taught to avoid putting anything in their mouths except food. Adults, too, should refrain from the habit of chewing on leaves or twigs of plants as they walk through a garden or in the woods. Collecting and eating wild mushrooms, unless you know positively they are edible, is very dangerous business. There are no satisfactory guides available for the identification of edible wild mushrooms in Florida.

Skin irritation or dermatitis caused by contact with a plant is sometimes difficult to trace to its source. If it occurs periodically, an effort should be made to remember what contacts preceded the out-

breaks. In this way the culprit may be identified and avoided in the future if the plant cannot be entirely eliminated. Among the most common causes of contact dermatitis are poison ivy, common ragweed, oleander, mango leaves and fruits, yellow jessamine and greenhouse primulas. Not everyone is susceptible to all or any of these and occasionally individuals are irritated by contact with other, often less-common plants. Susceptible individuals usually can diagnose the cause of their own troubles by close observation of the circumstances under which their disability occurs.

The name and nature of the toxic content of the poisonous plants in the bulletin are mentioned whenever they are known. In only a few very cases is the percentage of the toxic material known. In most poisonous plants the concentration of the poison varies from one specimen to another so that percentages are often unreliable. Since the concentration of the poison may be higher in some plant organs than in others, this information is furnished wherever known.

Poison ivy is not described in this publication because it is seldom found in home gardens. Plants poisonous to livestock are considered in Bulletin 510A, Plants that Poison Farm Animals.

Yellow allamanda
Allamanda cathartica L.

Description

Yellow allamanda (Allamanda cathartica L.) (Fig. 1) is a vigorous vine or weak-stemmed shrub with leafy stems growing as much as 15 feet in a season. The leaves, produced in pairs or in whorls of 3 or 4, are elliptical, 4 to 6 inches long, and tapering at both ends. The large yellow flowers are produced in clusters near the ends of the branches. The individual flowers, which open a few at a time, vary from 2 to 6 inches in diameter and have 5 rounded petals attached to a cup-like tubular throat that becomes abruptly narrow below. The fruits are rounded, spiny pods, an inch or more in length.

Habitat and distribution

Yellow allamanda, a native of Brazil, has become very common in Florida, especially from Orlando southward. There are many forms varying slightly
Castor-bean  *Ricinus communis* L.

*Palma crista*—Castor-oil plant

**Description**

Castor-bean (*Ricinus communis* L.) (Fig. 3) is a robust annual herb, growing to the size of a small tree in South Florida. The strong stems, 4 to 10 feet tall, are erect, often crooked, green or red to purple in color and sometimes covered with a white, waxy coating. The alternate leaves, 4 to 30 inches across, are simple and borne on long, stiff stalks; the leaf-blades are thin with prominent ribs, green or reddish, star-shaped with 5 to 9 or more lobes, thin and finely toothed along the margin. The stalk is attached to the leaf-blades some distance in from the margin. The flower clusters are produced at the ends of branches, but because lateral branches grow past them they appear lateral. The flowers, produced in narrow, upright clusters 6 to 12 inches long, are greenish white or reddish brown, about ½ inch across and lack petals. The fruits are erect, oval, green or red and covered with stiff, fleshy spines. The seeds, 3 in each pod, are about ½ inch long, elliptic, black, white or mottled with gray, black, brown and white.

**Habitat and distribution**

Castor-bean, a native of the tropics, has been widely planted as an ornamental and to a less extent as a crop plant. From these plantings, seeds have been scattered widely over Florida. It is common on rich soil in gardens, around dumping grounds and in the Everglades around Lake Okeechobee.

**Toxicity**

Castor-bean contains a poisonous principle, ricin, which is a true protein, as well as ricinoleic acid and oleic acid.

**Rosary pea  *Abrus precatorius* L.**

*Crabeye—Jequirity pea*

**Description**

Rosary pea (*Abrus precatorius* L.) (Fig. 4) is a woody vine, climbing to a height of 10 to 20 feet on other plants, arbors or other support. The young stems are green but the older woody parts are covered with brown to gray bark. The leaves, borne alternately, consist of 8 to 15 pairs of oblong leaflets each about ½ inch long. The flowers are produced in axillary racemes 1 to 3 inches long. The individual flowers are about ½ inch long, sweet pea-shaped and either white, creamy or purplish in color. The pods are flattened, broad, about 1½ inches long, brown and covered with appressed hairs. The pods persist on the vine, splitting along 1 side and spreading open to show the 2 rows of seeds. Each seed is ovoid, less than ¼ inch long,
bright scarlet in color except for the lower one third, which is jet black.

Habitat and distribution

Rosary pea is a native of Burma but it has been widely distributed around the world in tropical and subtropical climates. In Florida it is rarely planted but has become a weed along fencerows and in gardens, citrus groves and native vegetation from Orlando southward. The highly colored seeds have been made into rosaries and necklaces and fastened on dolls for decorations. They are often used as toys by children.

Toxicity

The poisonous principle, concentrated mostly in the seed, is known as abrin, a toxalbumin. It is slowly absorbed from the gastrointestinal tract. Little seems known concerning the composition of abrin. The seed coat is very hard and impervious to moisture so that whole, uncracked seeds may be swallowed with little or no danger. However, one seed thoroughly chewed and swallowed is sufficient to cause fatal poisoning of an adult human being.

The symptoms in humans are nausea, vomiting, severe diarrhoea, weakness, cold perspiration, colic, small and accelerated pulse, and trembling of hands.

Crape-jasmine *Tabernaemontana divaricata* (L.) R. Br. (Ervatamia coronaria (Jacq.) Stapf.)

Description

Crape-jasmine (*Tabernaemontana divaricata* (L.) R. Br.) (Fig. 5) is a rather succulent shrub, 3 to 8 feet tall, with widely forking or whorled, smooth branches. The bright green leaves, opposite or in threes, are oblong or lance-shaped, 3 to 6 inches long. The flowers, 1 to 2 inches across, are produced in small clusters in the upper forks of the branches, usually below the upper leaves. They are pure white with a yellowish tubular base. The petals are 5 in number (many in double-flowered varieties) and crimped on the margins, hence the common name.

Habitat and distribution

Crape-jasmine, a native of India, is now widely planted in Florida gardens as far north as Gainesville. It is also frequently used in base plantings and shrub borders and occasionally as a hedge plant. It is not showy because the flowers are hidden under the leaves. However, the flowers are somewhat fragrant.

Toxicity

The roots and bark of crape-jasmine contain $1\frac{1}{2}$ to 2 percent of an alkaloid that has been used in the treatment of cataracts and cardiac diseases. The flowers contain steroid-like compounds. None of these materials have been more specifically identified in literature.

Crown-of-thorns

*Euphorbia milii* Ch. des Moulins

Description

Crown-of-thorns (*Euphorbia milii* Ch. des Moulins) (Fig. 6) is a low-growing, shrubby plant with very thorny stems and branches. The thick, fleshy stems are about 1 foot tall but may become scandent and as much as 3 feet long in a warm climate. They are purplish in color and armed with numerous stiff, sharp-pointed spines $\frac{1}{2}$ to 1 inch long. The leaves, obovate in form, 1 to $2\frac{1}{2}$ inches in length, are few in number, mostly at the ends of new
growth. The small flowers are produced in long-stalked clusters of 2, 4, 6, or 8, each with a pair of broadly ovate, bright red bracts about \( \frac{1}{2} \) inch across.

Habitat and distribution

Crown-of-thorns is native in Madagascar but is now widely grown as a cultivated plant. It is often used as a house or window plant or grown in a pot or jardiniere for a porch or doorstep ornament. In the southern part of the state the plant is grown out-of-doors along walks, by walls and in rock gardens.

Toxicity

The milky sap or latex is quite irritating to the skin of some people, acting as a vesicant. The root contains an unclassified toxic substance. The plant has been used as a purgative.

**Dieffenbachia Dieffenbachia seguine** (Jacq.) Schott, **D. maculata** (Lodd.) Bunting

Description

Dieffenbachia, or dumb cane (*Dieffenbachia seguine* (Jacq.) Schott, *D. maculata* (Lodd.) Bunting) (Fig. 7) is a tender house plant. The green stems, 3 to 6 feet tall, are fleshy, about 1 inch or less thick. The leaves, borne on leaf-stalks 2 to 6 inches or more long, are nearly oblong in general shape. The leaf bases are wedge-shaped or slightly heart-shaped but the tips are sharply pointed. The basic color of the leaves is green but many horticultural forms are variously spotted, streaked or mottled with white, lighter or darker green or yellow green. Some varieties are green only on the margins and midrib. The inconspicuous floral parts look like a tightly rolled green or spotted leaf, 2 to 4 inches long, enclosing the minute true flowers.

Habitat and distribution

Dieffenbachia is native to tropical American countries but was brought into cultivation as a greenhouse or conservatory plant over 100 years ago. Although it is widely used as a house plant in Florida, it is also planted out-of-doors in the warmer parts of the state. It is often used for decorating restaurants and hotel lobbies. Plants are readily available in variety stores and at florists.

Toxicity

The nature of the toxic constituents of dieffenbachia is still a mystery. There are enough raphides of calcium oxalate present to cause irritation of the mucous membranes if the plant is chewed. Swallowing the chewed material may result in swelling of the throat and temporary loss of speech; hence, its name “dumb cane.” It is reputed to cause temporary sterility. Other more serious toxic symptoms have been recorded but the causal agent has not been isolated.
Related species

Gloriosa rothschildiana O'Brien (Fig. 8) is similar but the flower parts are wider and wavy on the margins. The toxicity is said to be similar.

Habitat and distribution

Gloriosa is native to the tropics of Asia and Africa but is widely used as a garden flower. It may be planted around the home in any part of Florida. The brilliantly colored flowers make it a favorite to plant among shrubs or on an arbor or fence. The tubers are often dug in the fall and stored for the winter. The seeds are often saved the same way.

Toxicity

All parts of this plant are poisonous, with the highest concentration of toxic materials in the tubers. Death has been reported to have occurred within 4 hours after tubers were eaten. Apparently, the most toxic content is a mixture of alkaloids, chiefly colchicine (0.3 percent of the tubers).

Symptoms reported include numbness of lips, tongue and throat; nausea and diarrhea with blood; giddiness and loss of power in limbs; heaviness of eyelids and photophobia; respiratory embarrassment; a quick, feeble pulse; convulsions and loss of consciousness.

Gloriosa Gloriosa superba L.

Climbing lilly

Description

Gloriosa (Gloriosa superba L.) is a slender, herbaceous plant growing from a thick, fleshy, elongated, pale brown, tuberous rootstock. The weak stems, upright at first, attain a height of 5 to 7 feet. The numerous narrow leaves grow alternately or in pairs all along the stem except on the lower 5 to 8 inches. Each leaf is 4 to 7 inches long, $\frac{1}{2}$ to 1 inch or more wide and ends in a narrow curled tip. These leaf ends act as tendrils, twining around any suitable support and holding the plant in a more or less erect position.

The long-stalked flowers are produced in the axils of the upper leaves or on 2 or 3 short lateral branches. Each flower consists of 6 parts, 2 to 3 inches long, $\frac{1}{2}$ inch wide, narrow, crinkled along the edges and yellow or yellow and red in color or becoming red all over as the flower fades. The floral parts are turned up sharply with the 6 yellow stamens and the green pistil projecting below them. The pod is pendant, 3 lobed, oblong and 2 to 3 inches long. The numerous seeds are orange brown and globular, about 1/16 inch in diameter.

Figure 9: Hydrangea.
**Hydrangea** *Hydrangea macrophylla* Ser.

**Description**

The garden hydrangea (*Hydrangea macrophylla* Ser.) (Fig. 9) is a stiff, stout shrub 3 to 12 feet tall. All parts of the shrub are smooth. The stems are green at first but soon become pale brown in color. The opposite leaves are elliptical, often broadly so, 3 to 6 inches long and light to dark green. The leaf tips are sharp pointed, the bases broad and the margins coarsely toothed. The flowers are borne at the end of stems in dense, rounded clusters sometimes a foot in diameter. The individual flowers are pink, blue or almost white. Each is about $\frac{1}{2}$ inch in diameter and divided into 4 or 5 rounded lobes.

**Habitat and distribution**

The common garden hydrangea is a native of Japan but is widely grown in Florida. This conspicuous shrub is usually planted around homes in the base planting, but it is also used as a specimen in the yard.

**Toxicity**

Garden hydrangea contains hydrangin, a cyanogenetic glycoside. One instance of poisoning by this plant in Florida is known.

**Carolina-jessamine**

**Gelsemium sempervirens** (L.) Ait. f.

Yellow-jessamine—Evening trumpet-flower

**Description**

Carolina-jessamine (*Gelsemium sempervirens* (L.) Ait. f.) (Fig. 10) is a high-climbing, woody vine that often covers the tops of small trees and bushes, but in the absence of support, may trail on the ground and produce many slender, more or less upright stems. The main stems of large vines are gray and 1 inch or more in diameter, but the majority of the branches are thin, wiry, much branched and tangled, glossy and dark reddish-brown in color. The short-stalked leaves are simple and always produced in pairs; the leaf-blades, $\frac{1}{2}$ to 2½ inches long, are ovate to lanceolate, not very sharp pointed, rounded at the base, smooth on the margin and dark green, though often marked with irregular reddish-brown discolorations, especially in winter. The clear yellow, sweet-scented flowers, produced in late winter and early spring, are borne in small clusters in the leaf axils of the slender twigs in such profusion as to form conspicuous masses of color. The individual flowers, tubular with 5 flaring lobes, are 1 to 1½ inches long. The seed pods are brown, flat, less than 1 inch long and contain several small, winged seeds.

**Habitat and distribution**

Carolina-jessamine grows abundantly in open hammocks, but is also found in thickets, swamps and open fields, along fence rows, around stumps, and on rocky bluffs. The vine is most widely distributed in northern Florida but occurs as far south as Osceola County.

**Toxicity**

Yellow-jessamine contains the crystalline alkaloid, gelsemine, and the amorphous alkaloids, gelsemine and gelsemoidine. Other alkaloids have been reported isolated from the plant. These alkaloids constitute the poisonous principles in the plant. They chiefly depress and paralyze motor nerve endings. Depression of the motor neurons of the brain and spinal cord result in respiratory arrest.

The flowers, leaves and roots contain the toxic alkaloids, with the highest concentration being in the roots from which extractions have been made for medicinal purposes.

![Figure 10: Carolina-jessamine.](image-url)
Jimsonweed *Datura stramonium* L.

Jimsonweed datura—Jamestown weed—Thorn apple

Description

Jimsonweed (*Datura stramonium* L.) is a large annual weed, 3 to 5 feet tall, with several widespread branches near the top of the stem. The main stem and branches are smooth and green or purplish. The alternate leaves are smooth, light green and stalked; the leaf-blades, 3 to 8 inches long, are thin, ovate to elliptic, pointed at both ends, and bear large, irregular, sharp-pointed teeth along the margins. The erect flowers, borne singly in the leaf axils, are short-stalked, funnel-shaped but flaring out into a 5-pointed star and white or pale bluish-purple in color. The 4-celled fruit is a dry, hard capsule, ovate, green, becoming pale brown, and covered with hard, sharp prickles. The pod, about 1 inch long, splits into 4 sections, each containing numerous seeds.

Habitat and distribution

Jimsonweed is found nearly all over the state, but more commonly north of Orlando. It occurs in cultivated fields, gardens, around farm buildings, particularly old barn lots, roadsides and refuse heaps and nearly always on fertile soil.

Related species

Certain horticultural forms of *D. stramonium* L. (Fig. 11) are more often found in gardens. These have large flowers, usually blue, purple or other-wise highly colored and the petals are often doubled or tripled. The plant known as angel’s trumpet or Gabriel’s trumpet (*Brugmansia suaveolens* H. & B. ex Wild.) Bercht. & J. Presl (Fig. 12) has large, white pendulous flowers and larger leaves than jimsonweed. Other *Datura* spp. and *Brugmansia* spp. are found occasionally in flower gardens. All these related species are equal in toxicity to jimsonweed and contain the same alkaloids.

Toxicity

Jimsonweed contains the toxic alkaloids hyoscyamine, atropine, and scopolamine, which make up about 0.3 percent of the dry weight of the plant. All parts of the plant, particularly the seeds, are poisonous. Children have been poisoned by eating the fruit or sucking the flowers.

Annual or rocket larkspur

*Consolida ambigua* (L.) P.W. Ball & Heyw. *(Delphinium ajacis* L.)*

Description

Annual larkspur *Consolida ambigua* (L.) P.W. Ball & Heyw. *(Delphinium ajacis* L.) (Fig. 13) is an upright annual garden plant grown for its flowers. Young plants form dense rosettes 5 to 10 inches
Habitat and distribution

Annual larkspur is strictly a garden plant grown in flower beds in the home garden. It is occasionally grown as a cut flower by florists and sold in shops as a bouquet.

Toxicity

No cases of larkspur poisoning are known for Florida. In Western states larkspur poisoning causes more losses of cattle than any other poisonous plant excepting locoweed. The toxic alkaloid, delphinine, seems to be the most powerful agent present and the most constantly associated with the trouble. Other toxic alkaloids that may be present include delphinoidine, delphisine and staphisagroine.

Annual larkspur is a common annual in flower beds in the home garden. It is not likely to be dangerous unless eaten in considerable quantity.
Hardy Larkspur *Delphinium cheilanthum* Fisch. and *Delphinium* spp.

**Description**

Hardy larkspur (*Delphinium cheilanthum* Fisch. and *Delphinium* spp.) (Fig. 14) is a hardy perennial plant often used in flower gardens. The rounded but deeply dissected leaves borne on long slender stalks are produced in rosettes of 5 to 10 or more from the base of the plant. The crooked flowering stems, growing from the center of the leafy rosette, reach a height of 12 to 18 inches or more. The few stem leaves, much smaller and narrower than the basal leaves, are cut into 2 to 4 segments. The pale blue flowers scattered along the flowering stems are slender-stalked. There are 5 petal-like parts in each flower with the uppermost segment prolonged into a conspicuous spur at the back.

**Figure 15: Mango.**

**Habitat and distribution**

Hardy larkspur is often used in home flower gardens and sometimes grown by florists for cut flowers. It is a short-lived plant in our climate, and young planting stock is usually imported from Northern nurseries. It thrives best in the northern and western areas of Florida.

**Toxicity**

For poisonous contents and qualities of hardy larkspur, see under *Annual larkspur.*

Mango *Mangifera indica* L.

**Description**

Mango (*Mangifera indica* L.) (Fig. 15), a large evergreen tropical fruit tree, grows up to 60 feet in height. The general form of the tree is usually low and spreading. The alternate leaves are narrow, pointed at both ends, 6 to 16 inches in length, 1 to 2 inches wide and dark green in color. The numerous lateral veins are prominent. Young growth is reddish and conspicuous. The yellowish flowers are small, 1/2 inch in diameter and produced in large, branched clusters at the ends of branches. The fruits are large, 2 to 6 inches in length, irregularly ovoid in shape and usually asymmetrical. The color may be red, yellow, or green with a red cheek. The yellow flesh is thick and penetrated by few to many tough fibers extending from the single, flattened seed outward towards the smooth skin.

**Habitat and distribution**

The mango is native to India but has been widely planted in tropical and subtropical regions around the world. It is commonly used as a home garden fruit tree in southern Florida. Older seedling trees are often left for shade. Mango trees may be found as far north as Orlando.

**Toxicity**

Because mango is related botanically to poison ivy, susceptible individuals who encounter the plant can develop a dermatitis similar to ivy poisoning. A relatively small proportion of our population suffers from this irritation but handling any part of the plant may result in trouble. Susceptible persons suffer severely around the mouth after eating fresh, ripe fruits. Cooking the fruits destroys the causal material.

Milk-bush *Euphorbia tirucalli* L.

Pencil cactus—Malabar tree—Euphorbia

**Description**

Milk-bush (*Euphorbia tirucalli* L.) (Fig. 16) is a shrub, or small, much-branched tree up to 15 feet tall. On old plants the trunk, 3 inches or more in diameter, is grayish but all the rest of the plant is
green in color. The branches and twigs are cylindrical, fleshy and $\frac{1}{4}$ inch or more thick. The twigs are produced in whorl-like clusters at the ends of each flush of growth. The leaves, 1 inch or less long, are narrowly oval and green. They are produced at the ends of the twigs and soon fall off. The small, inconspicuous flowers are produced with the leaves at the tips of the green twigs.

**Habitat and distribution**

Milk-bush is a native of India but has been widely planted in southern Florida. The effect is bizarre rather than beautiful, for the interest is in the bushy, green branches in the absence of conspicuous flowers or leaves. It has been used in base plantings, as a curious-looking specimen and rarely as a hedge plant. It is seldom grown out-of-doors north of Orlando but may be used as a house plant.

**Toxicity**

The milky sap of the milk-bush contains a vesicant that is quite irritating to the skin of many people. If eaten, the plant parts are reputed to be dangerously toxic but the poisonous content has not been identified. It has been used as a fish poison in its native country.

**Common oleander** *Nerium oleander* L.

**Description**

Oleander (*Nerium oleander* L.) (Fig. 17) is a woody shrub or small tree ranging in height from 5 to 25 feet. When allowed to grow naturally it produces a large number of stems and forms a dense clump, but occasionally plants are trimmed to a single large trunk with a much-branched crown. The bark on young stems is smooth and green, but older branches and trunks are gray and roughened by many raised lenticels. The numerous short-stalked leaves are borne in pairs or more often in whorls of 3 around the twigs. The leaf-blades are simple, narrow, evergreen, leathery, pointed at the tip, dull dark green above with a prominent lighter colored midrib. They are 3 to 10 inches long and smooth on the margin. The leaves usually turn yellow before falling and the leaf-scars are prominent on twigs and branches.

The flowers, produced in early summer or all year in the warmer parts of the state, are borne in upright clusters at the ends of branches on the upper part of the shrub. They vary in color from white through pink, creamy yellow and rose to deep red. Normally, there are 5 petals about 1 inch long with a fringed appendage at the base of each, but many cultivated forms are found in gardens with double (many petalled) flowers.
The pods, not commonly produced, are long, narrow, cylindrical and paired. The numerous seeds are furnished with a tuft of brown hairs. All parts of the plants, but especially the new growth, exude a gummy, sticky sap when injured.

**Habitat and distribution**

Oleander, an exotic plant, is found only where it has been planted, but it has been widely used for hedges, screen plantings and as an ornamental.

**Toxicity**

All parts of the plant are poisonous if eaten. One leaf is reported to be sufficient to kill an adult human. The dry leaves are almost as toxic as the green ones. Children may be poisoned by carrying flowers around in their mouths in play. A number of individuals have suffered serious poisoning after eating frankfurters roasted on oleander stems over an open fire at picnics. Inhaling smoke from burning oleander stems and leaves has caused symptoms of poisoning. A discomforting dermatitis is incurred by susceptible individuals following contact of the bare skin with any part of the oleander plant.

Two toxic glucosides, nerioidside and oleandroside, with properties similar to those of the digitalis glucosides, have been isolated from oleander. Symptoms include nausea, vomiting, colic, dizziness, drowsiness, decreased pulse rate, irregular heart action, marked mydriasis, bloody diarrhoea, unconsciousness, respiratory paralysis and death.

**Poinsettia** *Euphorbia pulcherrima* Willd.

**Description**

Poinsettia (*Euphorbia pulcherrima* Willd.) (Fig. 18) is a shrub or small tree, 5 feet or more tall. The old stems are brown but all stems of the season are green. The large green leaves are alternate, often on red stalks. The blades, 3 to 6 inches or more long, are ovate to elliptic, pointed at the tip, more or less rounded at the base with the margins entire or with coarse, shallow teeth. Healthy leaves are dark green above, paler and slightly fuzzy underneath. In fall, clusters of small, greenish flowers bearing bright yellow glands are produced at the tips of the branches. The floral bracts or leaves just below the flowers are colored bright red, although pink, yellowish or white forms may be found. The 3-lobed fruits are seldom produced except in the extreme southern part of Florida. All parts exude a milky sap when injured.

**Habitat and distribution**

Poinsettia is native to southern Mexico and Central America, but is widely planted all over Florida, sometimes being grown as a pot plant. It is often planted in base plantings and along fencerows. Few home gardens are without at least one plant or clump. In most areas the tops are injured by winter cold and the stems are cut back to the ground each spring.

**Toxicity**

The milky sap that is characteristic of poinsettia is quite irritating to the skin of susceptible persons. The sap has also been used as a depilatory. The fresh leaves and stems are reported to be somewhat poisonous if eaten.
Pokeweed  *Phytolacca americana* L.

*Poke—Pokewberry*

**Description**

Pokeweed (*Phytolacca americana* L.) (Fig. 19) is a robust herbaceous plant growing 6 feet or more in height from thick, fleshy roots. The stems, simple below, are much branched above. The stem and branches are smooth and colored green or purple. The lower leaves are a foot or more long, gradually diminishing until the upper ones are about 3 inches. All are spear-shaped. The flowers, produced all summer, are white, less than \( \frac{1}{2} \) inch across, and borne in narrow clusters several inches long. The flattened, purple-black, juicy berries are \( \frac{1}{3} \) to \( \frac{1}{2} \) inch in diameter and contain several seeds.

**Habitat and distribution**

Pokeweed occurs all over Florida. It is most often found in open hammocks and along their margins, but it is also frequent on neglected, cultivated land, along fencerows, around dumps or trash piles, and occasionally in gardens.

**Toxicity**

Pokeweed contains a toxic alkaloid and also a toxic substance called phytolaccotoxin. All parts of the plant, principally the berries and roots, are considered toxic. Cases have been reported in which children were poisoned by eating the berries and roots of the plant. The young spring leaves have been used as greens after thorough boiling and discarding the first water.

Symptoms occur about 2 hours after the plant has been consumed. Severe gastric-intestinal irritation occurs. Nausea, vomiting, purging, retching, spasms and severe convulsions occur, with death resulting from paralysis of the respiratory organs.

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**Top primrose  *Primula obconica* Hance**

**Description**

Top primrose (*Primula obconica* Hance) (Fig. 20) is a winter-flowering greenhouse ornamental plant with leaves growing in a dense rosette. Individual leaves are nearly round or rounded oblong, 2 to 4 inches long, blunt at the tip and heart-shaped at the base. They are slightly hairy all over with the margins uneven, wavy and roughened with tiny teeth. The leaf stalks are 2 to 3 inches long. The flowering stems, 2 to 6 in number, arise from the center of the rosette of leaves and are 4 to 8 inches tall, reaching well above the leaves. The pale pink to rose-colored flowers are produced in a whorl or cluster of 5 or more at the top of the flower stalk. The individual circular flowers are about \( \frac{3}{4} \) inch in diameter, flat and have a lobed margin. Behind each flower there is a green collar or calyx.

**Habitat and distribution**

The primrose is a home or greenhouse plant. It is not grown in Florida but many specimens are imported from the North by florists and sold during the spring months. When in flower, most of them are presented as get-well gifts to hospital patients or house-bound convalescents.

**Toxicity**

The glandular hairs on the stems and leaves contain primin, a contact irritant. Handling primrose plants results in an itching dermatitis in some individuals (about 6 percent of the population). The irritation resembles ivy-poisoning but is usually less severe.
specimen plant. Some horticultural forms have the foliage variegated with white or yellow margins or markings.

Related species

Japanese privet (Ligustrum japonicum Thunb.), with denser foliage, is more common than glossy privet. It is widely used for hedges. The flower clusters are much smaller and it bears very few, but similar, fruits. Several other kinds of privet also are planted on home grounds but none of them are common.

Toxicity

Records of poisoning by privet seem to be rare in the United States, but in Europe children have died from eating the fruits. The toxic agent is not positively identified.

Privet *Ligustrum lucidum* Ait. f.

*Ligustrum*

**Description**

Glossy privet (*Ligustrum lucidum* Ait. f.) (Fig. 21) is a shrub or small tree, 5 to 25 feet tall. The older stems are gray to gray-brown and roughened with numerous raised lenticels. The leaves are opposite on slender stalks, ovate, longer than wide, acute or tapering at the tip and pointed at the base. They are dark green above and paler beneath. The small white 4-parted flowers are produced in erect pyramidal clusters up to 10 inches long at the ends of new growth in summer. These are followed by heavy drooping clusters of blue or black fruits covered with pale waxy bloom.

Habitat and distribution

Glossy privet originated in the Orient but is now widely planted in Florida. It is frequently used as a base planting around homes and occasionally as a

**Figure 20: Primrose.**

**Figure 21: Privet.**

Tree tobacco *Nicotiana glauca* Graham

**Description**

Tree tobacco (*Nicotiana glauca* Graham) (Fig. 22) is a shrub or small tree 10 to 15 feet tall. The trunk is slender and the upright branches tend to be flexible, slender and green in color. The elliptical leaves 2 to 6 inches or more in length are light
or grayish green in color due to the thin, waxy coating on both surfaces. They are slightly leathery in texture and quite persistent. The tubular flowers are erect or drooping and borne in open clusters or panicles. The individual flowers, 1 to 2 inches long, are yellow or greenish yellow and only slightly flared open at the end. These are followed by egg-shaped seed pods about ½ inch long.

Habitat and distribution

Tree tobacco is a native of South America but is planted occasionally in Florida, more as a curiosity than as an ornamental plant. The appearance of tree tobacco differs widely from that of the commercial kinds of tobacco.

Toxicity

Tree tobacco, like other tobaccos, contains the alkaloid, nicotine, but this species also contains anabasine. Cattle are reported to have been poisoned by this plant in California, Australia and South Africa.

Tung-oil tree *Aleurites fordii* Hemsl.

Tung tree—Tung nut

Description

The tung-oil tree (*Aleurites fordii* Hemsl.) (Fig. 23) is a small deciduous tree with smooth bark, mucilaginous sap, thick twigs and horizontal branches often produced in whorls. The leaves are alternate, long-stalked and simple. The leaf-blades, 5 to 10 inches long, are broadly ovate, sharp-pointed, and often exhibit an additional point on each side of the tip; margins are entire and bases broad, sometimes rounded. The leaf-stalk bears 2 reddish or brownish glands or small knobs close to the leaf-blade. The flowers are produced in large clusters at the tips of the twigs in spring before the leaves appear. They are about 1 inch in diameter, consist of 5 to 7 pale pink or white petals, with deep brownish-red lines running lengthwise, and have reddish brown bases. The flowers are of 2 kinds, several pistillate (female) flowers and many staminate (male) flowers occurring in the same cluster. The fruits, produced on drooping stalks several inches long, are nearly globose, 2 to 3 inches in diameter and dark green, later turning brown. Each fruit contains 3 to 7 large, hard, rough-coated seeds with white flesh.
Habitat and distribution

The tung-oil tree, native of China, has been planted extensively in northern and western Florida as a source of oil. Stray seeds have produced trees along fencerows, on roadsides, and in other locations near tung orchards. It is sometimes planted as a shade tree in the yard.

Toxicity

The foliage, sap and fruit, as well as commercial tung meal, contain a toxic principle, a saponin, which characteristically induces gastroenteritis in animals to which they are fed. Cases of tung poisoning have occurred in humans, particularly from eating the nuts. A severe gastroenteritis develops with resultant mild to violent purging. Such cases should be treated symptomatically under the direction of a physician.

Yellow-oleander

*Thevetia peruviana* Schum.

Description

Yellow-oleander, lucky nut or tigerapple (*Thevetia peruviana* Schum.) (Fig. 24) is a shrub or small tree with a dense crown. The short trunk is widely branched with the branches dividing into numerous smaller branches to form a dense, rounded top. The alternate dark green leaves are narrow, 3 to 6 inches long, about 1/2 inch wide, glossy above and paler beneath. The yellow to dull-orange flowers are produced in small clusters near the tips of the twigs. Each flower, 2 to 3 inches long, is tubular but flares out into 5 lobes. The fruits are somewhat triangular in shape, attached to the middle of one side, making them wider than long or thick. They are fleshy and green, turning yellow and finally black at maturity. The “seed” or stone, pale brown or tan in color and shaped much like the fruit, is frequently carried as a good luck piece. It contains 2 seeds.

Habitat and distribution

Yellow-oleander is native in tropical America but has been introduced into most of the subtropical regions, including Florida. Only occasional specimens are found north of Orlando. It is planted as a specimen ornamental in gardens, parks and home grounds. Although it is commonly called yellow-oleander, the plant is not a true oleander.

Toxicity

All parts of yellow-oleander are poisonous if eaten. The poisonous materials in the plant include the glucoside, thevetin, and cardioton (digitaloid). The kernels or seeds from the nut contain a potent insecticide. All parts of the plant are unpalatable and not likely to be eaten freely except by children. Adults have been poisoned by eating the seeds out of curiosity.

Figure 24: Yellow-oleander.
(The illustrations in this publication were prepared from living specimens by Esther Google, formerly artist and assistant in research, College of Agriculture.)