



Oleander

Nerium oleander L.

Common names: oleander, rose bay

Native habitat: Mediterranean regions of southern Europe and southwest Asia

Characteristics

Oleander is familiar in Hawaii as an upright, ornamental shrub or small, densely branched tree growing 4–30 ft tall. Dwarf, intermediate, and large selections are available.

Oleander's branches have a smooth pale-green to light-gray bark that produces milky juice when cut. Each stem node has two or three narrow, elliptic leaves with entire (smooth) margins, 4–12 inches long and ½–1 inch wide, on short petioles. The foliage is evergreen and leathery, dark green above and lighter green below, and turns yellow before dropping. Some cultivars have variegated foliage.

Oleander flowers the year round but most profusely during the warmer months. Clusters of flowers develop on the tips of branches and are composed of several 3–4-inch flowers that may be red, pink, salmon, yellow, white, or bicolored. The petals on each flower are about 1 inch long. Flowers may be single with five petals, intermediate with two sets of petals, or double with two or more whorls of petals. Fruits of oleander are long narrow pods usually occurring in pairs, but fruiting is uncommon in Hawaii.

Landscape uses

Oleander is a versatile landscape plant for sunny seaside and inland locations. It is one of the basic shrubs used for hot, dry locations in the Islands. Oleander has fast growth, showy flowers, and is adapted to full sun and poor soil conditions. It has high tolerance of drought and soil salinity but does not do well when directly exposed to salt spray. Selection and hybridization have resulted in cultivars of various sizes, flower colors, and shapes.



Oleander is popular for screens but can also be used as a small “standard” tree or shrub or as a potted lanai plant. Dwarf forms can be used as a large groundcover, landscape shrub, or container plant.

For best results and minimum maintenance, choose a cultivar with growth characteristics and ultimate size that fits the intended landscape use. Full sun is necessary for best flowering and development of a full, fountain-shaped crown. In shade, growth becomes lanky, and plants produce few flowers. Oleander tolerates a wide range of soil types and grows well in sandy, dry soils. It is adaptable to a soil pH range of 5 to more than 8.

Cultivars

Many cultivars of oleander have been selected and are grown in Hawaii. Selected oleander cultivars are listed and described in Table 1.

Culture

Oleander transplants easily. Newly planted oleander should be irrigated regularly for the first few months. Larger-sized transplants benefit from regular irrigation for a year after planting. Oleander is very drought tolerant once established, but moist soils or irrigation stimulate growth.

*Replaces Instant Information/Ornamentals and Flowers Series no. 4, by Fred Rauch, 1979.

Oleander has low soil fertility requirements. Established landscape plants often do not need fertilizer when their root systems extend into lawns, where they absorb nutrients from fertilizers applied to turf. For small plants, or those not associated with managed turf, growth may be stimulated with up to three applications per year of a complete fertilizer. Use a rate of 1 pound nitrogen per 1000 square feet applied to the area within 1½ to 2 times the canopy diameter. Organic sources of nutrients and slow-release inorganic fertilizers extend fertilizer availability.

Oleander generally requires some pruning for best flowering. "Suckers" (water sprouts) often develop along the lower portions of main stems or from roots. Excessive suckering, especially with young plants, inhibits flowering. Tip pruning to remove old, spent flower clusters will increase the number of blooming tips.

Dwarf cultivars occasionally grow tall shoots that must be removed to maintain the planting. Shoots of some dwarf and miniature cultivars occasionally die to the ground, and this dead wood should be removed.

The natural clumping-type shape is preferred in hedges and screen plantings. If severe pruning is necessary to improve plant shape or form, prune oleanders anytime after flowering declines. Oleander is often pruned hard annually in the spring to shape and control size. Such severe pruning often induces excessive vegetative growth, basal sprouting, and fewer but larger flower clusters.

Removal of one-third of the older stems or canes in successive prunings over three years is preferred to completely cutting back the plant to ground level. This is called rejuvenation pruning:

First year: remove one-third of the old, mature stems near ground level.

Second year: remove one-half of the remaining old stems, thin overcrowded new shoots, and head back long, new shoots from last year's growth.

Third year: remove the remaining old stems, thin crowded younger shoots, and head back the long, new shoots.

The desired form and size will be apparent at the end of the third year of growth.

Pests

Oleander can be relatively pest-free in the landscape with proper placement and pest monitoring. The primary pest is the oleander scale, and caterpillars and aphids occasionally are found. Pythium root rot can occur in very wet locations.

Propagation

Oleander can be propagated vegetatively by softwood, semi-hardwood, or tip cuttings at any time of year. Use of rooting hormone improves rooting percentage. The plant can also be tip- or air-layered.

Oleander toxicity

According to the *American Medical Association Handbook on Poisonous and Injurious Plants*, all parts of the oleander plant are poisonous. This extremely toxic plant can poison livestock and humans at any time of the year. Lethal doses of leaves for livestock have been established for horses (15–30 grams), cows (10–25 g), and sheep (1–5 g).

Many people in the landscape industry have spent years working with oleander without experiencing oleander poisoning. However, there are reports that children in India died from eating the flowers, and in Florida people using oleander sticks to cook hotdogs were poisoned.

Symptoms. Action of the poisons in oleander is similar to the action of the heart drug digitalis. The usual symptoms are severe gastroenteritis, diarrhea, abdominal pain, sweating, and weakness. These signs appear within a few hours after eating the leaves. Cardiac irregularities and increased heart rate are common. Contact a physician, hospital, or poison-control center if ingestion is suspected.

Precautions. Because of its poisonous nature, placement of oleander in a landscape should be carefully considered. The best use of this plant may be in areas where people will not come in direct contact with it. Parents should avoid planting oleander in their home landscape where there is a potential for small children to eat parts of the plant. When disposing of pruned branches, do not burn them. The volatile oils that make the plant poisonous can become airborne and may cause respiratory difficulties if the smoke is inhaled. Pet owners and livestock producers also are cautioned to place this plant out of the reach of animals that might graze on it.

Oleander should not be eliminated from Hawaii's landscapes. To do so would limit our choices of colorful flowering shrubs that thrive in adverse environmental conditions with minimal care. A better approach is to educate the general public to treat oleander plants with respect and to educate homeowners and landscape industry workers to place oleander where the danger of poisoning will be limited.

David Hensley, *Extension Landscape Specialist*
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Table 1. Characteristics of selected oleander cultivars.

Cultivar	Flower color	Flower type	Origin	Comments
Dwarf (mature height: 3–5 ft)				
Petite Pink	pink	single	Los Angeles Arboretum, 1973	Good selection for home landscapes
Petite Salmon	orangish-pink	single	L.A. Arbor., 1973	Can be hedge to 3 ft; will grow to 6 ft; tightly branched
Marrakesh™ Dwarf Oleander	red	single	Monrovia, 1994	Grows 5–7 ft high
Marrakesh™ Moned	red	single	Monrovia, 1994	Grows 5–7 ft high
Morocco™ Dwarf Oleander	white	single	Monrovia, 1994	Grows 5–7 ft high
Morocco™ Monte	white	single	Monrovia, 1994	Grows 5–7 ft high
Intermediate (mature height: 8–10 ft)				
Algers™ Monal	red	single	Monrovia, 1978	Grows 8–10 ft high and wide
Casablanca™ Monca	white	single	Monrovia, 1978	Grows 8–10 ft high and wide
Mrs. Roeding or Carneum florepleno	salmon-pink	double	Germany, 1854	Slightly weeping, blooms tend to hang on; grows to 6 ft
Ruby Lace™ Monvis	red		Monrovia, 1986	Large flowers, wavy-edge petals
Tangier™ Monta	pink	single	Monrovia, 1978	Grows 8–10 ft high and wide
Tall (mature height: 10–25 ft)				
Atropurpureum	purple-red	single	Belgium, 1835	Large flowers
Calypso	dark pink	single	Florida, 1975	Vigorous
Comfe, or Commandant Barthelemy	red and pink with yellow margins	double plus	France, 1898	Large flower
Hardy red	bright red	single	1965	Large flowers
Hardy pink	pink	single	—	Showy
Isle of Capri	light yellow	single	1963	
Pink Hawaii	salmon pink with yellow throat	single	1965	Vigorous
Rosium	rose pink	single	Italy, 1872	Profuse flowering and vigorous
Sister Agnes	white, cream throat	single	France, 1868	Fragrant, large flowers; very vigorous.
Variegatum	pink	single	France, 1822	Narrow foliage, marginal variegation.
White	white	single	1874	