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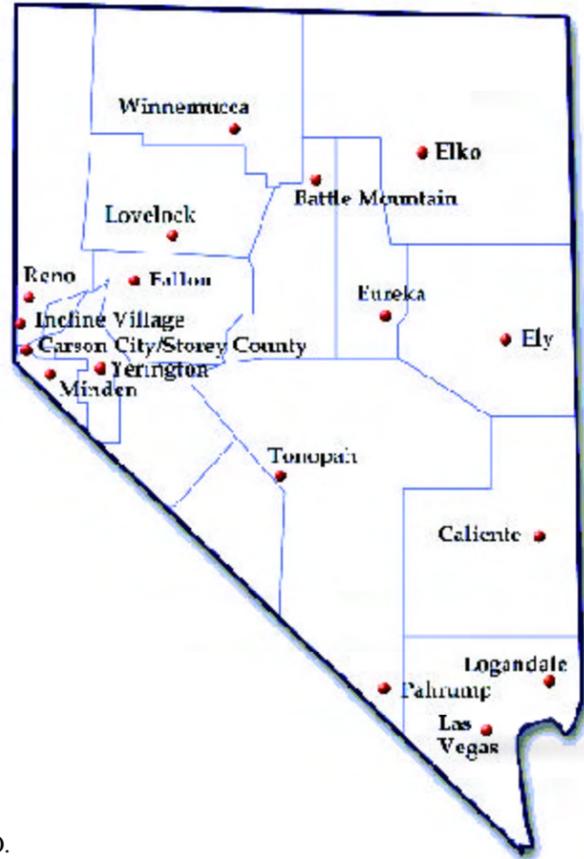
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COOPERATIVE EXTENSION

Bringing the University to You

Oleander

A Versatile Shrub for Southern Nevada

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Introduced from the Mediterranean area, Oleander (*Nerium oleander* L.) is a perennial, evergreen, flowering shrub or small tree up to 25 feet tall. Oleander is extensively used in landscaping and along roadways. It may also be grown indoors. The three to ten inch-long leathery leaves are narrow and sharply pointed. Flowers are produced in the spring through fall and are white, yellow and many shades of red or pink. They may be single or double flowers and they are very showy. Over 400 cultivars are available worldwide. The plant also produces pods that contain many seeds. Oleander exudes a thick, white sap when a twig or branch is broken or cut. Its shallow roots often spread widely in the landscape, especially where moisture is present.



Showy, colorful flowers make Oleander a desirable landscape shrub.

Biology and ornamental uses: Oleander is a very desirable ornamental. Its eye-catching flowers are borne on new growth in terminal clusters each year. They may be single flowers with five 1½ to 2 inch-long petals or they may be true double flowers. Peak flowering occurs in spring through summer, with some cultivars flowering nearly year round in mild areas. Colors include white, cream, pinks, red, purple, yellow, apricot, orange and shades in between. Long slender pods, five to seven inches long, are produced several weeks after the flower is spent. As flowers are produced all season long, so are the fruits. The fruits eventually cast their small fringed seed and drop from the plant.

Oleander usually grows eight to 15 feet tall and spreads about the same, but selected cultivars are more compact at four to five feet. It is easily transplanted into most soils, although it grows well in nutritionally poor, even slightly salty soils. Oleander responds aggressively to more fer-

tile conditions. It prefers well-drained sites and is tolerant of dry, hot, windy exposures. Oleander is well adapted to coastal sites in the southern states where it endures salt spray from the ocean. Most cultivars perform very well in western deserts with irrigation. In southern Nevada, Oleander has proven to be drought tolerant when necessary, but at the same time it is also a comparatively high water-using ornamental. Research conducted in Las Vegas by the University of Nevada, found Oleander to be very tolerant of overhead irrigation with saline water, making Oleander an ornamental capable of irrigation with treated effluent waters from water treatment plants.

Oleander dies to the ground at temperatures near 5 °F, but it often recovers to grow, flower and fruit in the same year. Below 5 °F, however, it dies outright.

In much of California, Oleander is planted along freeways as a hedge. In the highway median, it serves as a barrier to opposing traffic and screens out the glare of

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oncoming headlights. Oleander is versatile and may be grown in tubs, borders, along foundations, walks and parking lots as screening. It tolerates reflected light and heat very well. In landscapes, it is used as an individual specimen and in artistic groupings. Most cultivars provide nearly season-long color and as a minimum, an attractive display of dark green, smooth, leathery evergreen foliage. Oleander is a very durable, beautiful, low-maintenance ornamental adapted to many western gardens.

Although scale, aphids, mealybugs, caterpillars, nematodes and a few diseases such as gall and virus infect Oleander, this is not considered a pest-ridden ornamental. In fact in the western U.S., pest problems are minimal. Most gardeners consider Oleander a low-maintenance element in the landscape requiring occasional litter clean up and pruning.

Oleander is easily propagated from seed, cuttings, division and by grafting. This makes it easy to exchange among gardeners and explains its popularity among plantsmen.

Toxicity: All parts of Oleander are very toxic. A single leaf, if eaten, is potentially lethal to humans, especially the young and very old. Fortunately, the leaf is bitter and would be very difficult for a person to eat. Human poisoning occurs, but death is rare. Oleander poisoning of humans was studied for 20 years by the California Department of Food and Agriculture along with other plants, products and chemicals with potential to harm or kill humans. No deaths were reported from Oleander in California over the years, except the death of a 96-



Prune to prevent seed and seed pod litter.
Use caution when planting or pruning.
Remember, every part of Oleander is toxic.



White-flowered cultivar of Oleander with evergreen leaves.

year-old woman in Contra Costa County who apparently took her own life by eating the leaves of the plant. No deaths have occurred in Nevada from Oleander.

Most poisonings occur by the consumption of fresh or dried leaves, but the entire plant is toxic, including the sap. Animals that have been poisoned include: cattle, horses, sheep, goats, llamas, and household pets. Oleander is not considered good tasting, but may be eaten by hungry or curious animals. Dried or wilted leaves might be slightly more palatable than fresh leaves, however they are still toxic. It has been reported that 30 to 40 leaves could be fatal to a full-grown horse. Smoke, from burning Oleander, and its sap are extremely hazardous. Inhalation of the smoke can cause respiratory problems and the sap can cause a rash if inadvertently rubbed on the skin, in the eyes or put in the mouth. Water in which the plants have been placed is also considered toxic. Keep beehives away from Oleander plants. The honey produced from the bees working the plant may be toxic.

Oleander has not been shown to be allergenic, in spite of its exposed stamens and season long flowering. Some people find its fragrance unpleasant and its sap will cause skin rashes. Keep it out of the eyes and mouth and off the skin.

Those that prune and handle its branches should use caution and wear protective eye-wear, gloves, long-sleeved shirts and long pants. Prunings and debris from Oleanders should not be burned. Dispose of them in a landfill.

Poisoning symptoms may develop rapidly, or death may occur without much prior warning. Symptoms of poisoning include: dilated pupils, impaired vision, difficulty in breathing, depression, gastrointestinal distress, vomiting, diarrhea and abdominal pain. The toxins found in Oleander are cardiac glycosides that induce cardiac arrhythmia. The heart rate may increase, decrease, or the heartbeat may be erratic. Extremities become cold with the progress of poisoning and mucous membranes become pale. Trembling and collapse can occur, followed by coma and death within a few hours. These toxins are very dangerous for infants, small children and the elderly.

First aid: If ingestion is suspected, keep the person quiet, inactive and seek medical attention immediately. The telephone number for the National Poison Center Hotline, 800-222-1222, should be conspicuously posted in appropriate locations where Oleander is present.

First aid for animals that have consumed Oleander begins with contacting a veterinarian immediately. The sooner the animal is given emergency care, the greater the chance of survival. Poisoned animals should be kept as quiet and inactive as possible to avoid further stress on their hearts. Oleander toxins cause the same problems for animals as they do for humans.

Prevention: This includes being able to identify Oleander and keeping humans and pets away from the plant and its debris. Oleander should not be planted where children play to reduce the risk of exposure and poisoning from chewing, tasting, or ingesting portions of the plant. If not removed, keep the plants out of the reach of



Showy Oleander cultivars are available in a variety of different colors and heights.

infants and young children. Stems and leaves should be pruned and dead leaves removed. Children should also be taught not to touch, eat, or play with any of the plant parts. Oleander should not be grown close to a vegetable garden or used as a mulch for edible plants. Oleander should not be placed where animals are able to consume it. Leaves, pruning debris and seeds are all extremely toxic and require extra care to ensure that they do not fall into occupied pastures. As a general precaution, do not plant Oleander in or around livestock enclosures—corrals, pastures, and paddocks.

Conclusion: Oleander is a beautiful plant that is able to thrive in adverse environments with minimal care. Because of its poisonous nature, it must be used in a landscape with caution. In summary:

- Use Oleander in areas where people will not come in direct contact with it.
- Keep infants away from the plant and teach children not to touch, eat or play with Oleander.
- Do not plant Oleander where animals are able to consume it or its debris.
- Do not burn prunings, leaves, seeds or flowers. Dispose of them in a sanitary landfill.
- Do not use its branches to hold food for roasting—marshmallows, hot dogs, vegetables, etc.
- If Oleander is ingested, contact a doctor immediately or a veterinarian if it is consumed by an animal.

Oleander is a durable shrub that adds beauty to the landscape. Its ability to succeed in difficult environments makes it a desirable shrub for many sites. Education and precaution are the best approaches to minimizing the dangers of Oleander.

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