Oleanders (*Nerium oleander*)

For Galveston County and the Texas Upper Gulf Coast:

In the early 1840’s, oleanders were first brought to the port of Galveston, from Jamaica, by local businessman, Joseph Osterman. Osterman’s sister-in-law, Mrs. Isadore Dyer, was instrumental in growing and distributing these early plants and within a few years, oleanders could be found planted in landscapes throughout the island.

The 1900 hurricane devastated Galveston’s landscape and the raising of the island provided an “opportunity” to carefully select plant materials to replace those lost in the storm. Given their adaptability, beauty and rich history, oleanders were an obvious choice. Soon after, Galveston became known as the Oleander City.

Today, many individuals along the Texas Upper Gulf Coast are making important decisions about post-Ike landscape renovations. Once again, choices must be made about what plants to use to replace those lost in the storm. Once again, the adaptability, beauty and history of the oleander make it an excellent choice for area landscapes.

Description:
This evergreen shrub can reach heights of up to 20’ but are most often pruned to a smaller size. Dwarf cultivars are also very popular reaching heights to 4’. Dark green, lanceolate leaves occur in whorls of 3. Clusters of flowers grow at the ends of branch tips.

Soil:
Oleanders are extremely tolerant of a broad range of soil types, from heavy clay to well-drained sand. These plant materials can also withstand relatively high levels of sodium, chloride and similar salts in the soil, as well as salt spray on the foliage. Oleanders also thrive in soils with high pH and alkalinity. The oleander’s ability to adapt to these various soil conditions is one of the primary reasons it is so widely used in Gulf Coast landscapes.

NOTE: Despite their well-documented salt tolerance, many oleanders succumb to salt damage as the result of tidal flooding from hurricane Ike. It is widely speculated that many of the established plants that died were pre-disposed to injury as the result of prolonged drought and stress conditions preceding the storm.

Temperature:
Hardiness is the term used to describe a plants ability to tolerate cold temperatures. The USDA Hardiness Map divides the US into several Hardiness Zones based on a range of average low temperatures. Galveston County and the Texas Upper Gulf Coast are located in Zone 9, with a minimum temperature range of +20 °F to +30 °F. Caution: These are average lows and it should be noted that on occasion temperatures can dip below the +20 °F mark.

Oleanders are hardy from zones 8 – 10 but damage can occur at temperatures ranging from +15 °F to +20 °F. Light frost damage is not uncommon. In extremely cold years along the Gulf Coast plants may completely defoliate but rarely die to the roots. Damaged plants may require pruning to re-shape the canopy and to remove dead limbs/branches.
Light:
Oleanders due best in full sun but will tolerate partial shade. Plants grown without the benefit of adequate light tend to become tall and leggy. This can definitely detract from the natural rounded form of the plant. Many established oleanders compete for light in the landscape because they were not provided with enough room at planting to reach their mature size. Carefully review the size specifications of select cultivars before planting and make plans to provide adequate space to accommodate plants as they grow and mature.

Pruning:
Oleanders can be grown in several different forms including rounded shrubs and small trees. Pruning occurs most often to maintain these growth habits. Some gardeners severely prune plants in early – late fall to stimulate new growth. Since oleanders bloom on new wood, this practice can enhance flowering. Although quite common, fall pruning is not necessary or recommended. Regularly removing dead, damaged and/or insect/disease infested limbs/branches can improve plant health. Oleanders can withstand severe pruning and many mature, established plants have been “rehabilitated” through the use of careful pruning.

Toxicity:
A naturally occurring toxin in oleanders (Cardenolide Glycosides), when ingested in certain quantities, can be harmful/fatal to humans and pets. Since this toxin occurs primarily in the sap, be sure to wash hands thoroughly after pruning or handling plant parts. Fumes from burning oleanders can also be toxic. If an individual comes in contact with any poisonous materials, contact the local Poison Control Center immediately.

Fertilizer:
Most oleanders do not require regular fertilization. However some (especially newly planted) cultivars may benefit from the occasional application of a nitrogen (N) fertilizer. Generally speaking, no more than 1lb. of actual N per 1,000 square feet should be applied. The use of a no/low phosphorus (P) fertilizer is recommended to avoid potential accumulations of P in the soil. This practice can also help reduce potential contamination of surface and groundwater resources from landscape runoff. Select, handle, apply and store fertilizers safely and according to label instructions.

Irrigation:
Oleanders are very drought tolerant and many survive without benefit of supplemental irrigation. To achieve “optimum” growth it is necessary to apply water during the hottest/driest months of the year. Water should be directed to the root system and the foliage should be kept as dry as possible. This will help limit leaf-scorch damage. Lawn irrigation systems are typically not well designed to water landscape beds and mature trees/shrubs. Avoid excessive irrigation, especially during the cooler months of the year. Too much water can limit root system efficiency and predispose plants to a variety of root diseases (i.e. phythium, phytopthora, fusarium, rhizoctonia).

Pests:
Oleanders are susceptible to a number of insect and disease pests. Scale and aphids are extremely common. Chemical pesticides can be used to control these insects but many oleanders will tolerate even heavy infestations and continue to thrive and grow.

Flowering:
Oleanders flower on new growth, so promoting lateral branching in spring can increase bloom count. Flowers occur in clusters and colors include red, pink, coral, yellow, white and bi-colors.

Cultivars:
At present there are well over 50 different oleander cultivars (cultivated varieties) available for landscape use. Although these plants differ in their size, flower color, shape/form, cold tolerance and adaptability, it should be noted that most were derived from crosses of the 2 original Galveston oleanders, ‘Mrs. Isadore Dyer’ and ‘Ed Barr’. Mr. Ted Turner Sr. of Turner’s Nursery, Corpus Christi, TX is among the areas most prolific breeders of modern day oleander cultivars. His releases include Shari, Turner’s Carnival, Kathryn Childers, Turner’s Flirt, Ticked Pink, Sherrie Allen Turner, Trey Boy, The Sissy King, The Meggie T and the Elaine Turner - named after his wife.
Landscape Use:
Oleanders are an excellent small – large flowering shrub for use in commercial and residential landscapes. Many cultivars can reach a mature size of 12’ – 15’ in diameter, limiting their use to large-scale planting areas. The introduction of dwarf cultivars has helped address this problem. Despite the oleanders adaptability to a wide range of growing conditions and its historical ties to Galveston, many designers have limited their use of oleanders in contemporary landscape designs. Terms like “over used” and “boring” have been used by some to describe this important group of plant materials. However, it is important to remember - the success of post-Ike landscape renovation projects will largely depend on how well plants survive in the semi-tropical environment of the Texas Upper Gulf Coast. Few have stood the test of time better than the oleander.

Additional Information:
Galveston is the birthplace and home of the International Oleander Society (IOS). The IOS web site provides a wealth of information for serious oleander enthusiasts, as well as the casual home gardener. http://www.oleander.org

For more information on home landscape gardening we invite you to visit our web site at: http://aggie-horticulture.tamu.edu/galveston

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