

A Few Words About Gardening

From Africa via Thailand Comes Some Low Maintenance Garden Color

When discussing this column with Yolanda Ulrich (past editor of The South Dade News Leader), she raised the topic of xeroscaping (landscaping with a view to minimizing water use) and whether it was still being actively promoted. The answer to that question is yes, as it is one of the major focuses of the University of Florida's "Florida Yards and Neighborhood" program. I mentioned in my last column a list of low maintenance plants suitable for South Florida (includes those that are drought tolerant) available from the Miami-Dade Extension Office. Two of the plants on that extensive list are worthy of special mention for the outstanding color they can contribute to the yards of Miami-Dade.

The desert rose (*Adenium obesum*) and more especially the crown of thorns (*Euphorbia milii*) are familiar as landscape plants to long time residents of Miami-Dade. Interest in the crown of thorns has waned over the years, for although maintenance free, it can become an untidy tangle of stems and spines. The desert rose is, more often than not, grown in a container and has a reputation for being very prone to stem and root rots. It is now time to reconsider both of these plants, especially in view of the spectacular new cultivars that are becoming available.

The crown of thorns (*E. milii*), a native of Madagascar, is a sprawling succulent member of the spurge family (Euphorbiaceae) that possesses thick fleshy stems, armed with rows of stiff 1" spines. The true flower (cyathium) is much reduced, but is surrounded by two colorful red or yellow leaf-like structures (bracts – or sometimes cyathophylls). This arrangement is similar to that seen in a related plant *Euphorbia pulcherrima*, a Mexican native familiar to all at Christmas as the poinsettia.

Some of the earliest crown-of-thorns cultivars were natural crosses with a closely related species, *Euphorbia lophogona*. These were collected in Madagascar and brought into cultivation in Germany in the early 1960's (varieties such as 'Somona' and 'Gabriella'). About the same time Humel developed crosses in California that also involved *E. milii* and *E. lophogona*. These latter were termed "giant crown of thorns", and include varieties such as 'Rosalie' and 'Saturnus'. Crosses between the above two species have been given the formal botanical name *E. x lomi*.

More recently an extensive range of *E. mill x E. lophogona* hybrids with even larger flowers have become available from growers in Thailand, re-awakening current interest in 'crown-of-thorns'. These hybrids have been given the formal botanical name *E. x lomi* Poysean Group, or you may see them listed as *E. milii* Super Grandiflorum. This latter name has no scientific merit, but at least it conveys their major outstanding ornamental feature – the outsize flower heads. For the purpose of this article we'll just refer to them as 'Poysean hybrids'. Poysean is derived from a Chinese legend and means "eight saints". It is believed that taking care of these plants will bring good fortune.

The true flowers are insignificant yellowish discs, but are surrounded by colorful bracts which in the Poysean hybrids are more than 1" across, 5-6x larger than those found in *E. milii* species type. The effect is especially stunning because the flowers are clustered together (known as a cyme) to form flower heads that at a distance resemble a hydrangea. Some newer cultivars have more than 130 flowers in a cluster! Colors range from shades of red, pink, cream and yellow in subtle blends and delicate pastels. Flowering is more or less continuous, and is complemented by attractive, thick, bright green leaves, up to 6" in length. Naming of these cultivars is not consistent: some have the original Thai names, whilst in this country they have been given names such as Jingle Bells, Valentine and Pink Christmas, or are simply referred to by their color.

Like the original crown-of-thorns, the Poysean hybrids require a site in full sun, or at most no more than 20-30% shade, that is not liable to flood. Provide a free draining gritty soil, and occasional light applications of a slow release fertilizer, such as a palm special. It is rarely necessary to water – some leaf drop may occur in a severe drought. To reduce the risk of root rot, do not water when temperatures fall below 75°F. There are few diseases or insects, though petal blight can occur during spells of cool wet weather.

The Poysean hybrids are easy plants to propagate from cuttings, providing the potting medium is not too moist. Take tip cuttings, preferably in late winter/spring, dip in rooting compound once the flow of milky sap ceases, and place in a mix made up of equal parts sharp sand, Perlite and Canadian peat. After 3 months they should be ready to place in the landscape.

In the wild desert rose is found over a more widespread area than crown-of-thorns, one that encompasses arid areas of sub-Saharan and East Africa, as well as the SW tip of the Arabian peninsular. It is part of a plant family (Apocynaceae) that includes oleander, frangipani and alamanda. Although there is disagreement, the genus *Adenium* is currently considered to consist of only one species, with several sub-species and cultivars. Desert rose has succulent, thickened, grayish green branches (termed pachycaul), the tips of which bear small, leathery, glossy green leaves. The branches arise from a greatly swollen trunk (caudex), though this may be less noticeable in cultivated species. Very showy, rosy red, tubular flowers with flared lips and a white throat are produced year round, but are at their most impressive during the drier months of the year. There are other varieties with white, pink to purplish red flowers, some with color blends, and most recently a double flowering cultivar. A mature desert rose can grow to about 9'; however 6' is a more usual maximum height in South Florida. Two other (sub) species are available from a few local growers; *A. swazicum* has deep pink to almost purple flowers, and *A. somalense* deep red flowers, which in var. *crispum* appear striped.

Desert rose is easy to grow providing simple precautions are taken to prevent root and crown rots. Most important is the use of a free draining gritty soil, i.e. 1part Pema-Till/1 part sharp sand/ 1 part coir or Canadian peat. Secondly choose a site in full sun that does not flood and provides excellent air circulation. Thirdly, do not water or apply fertilizer

if temperatures are below 80°F. When winter temperatures are above 80°F, allow the soil to dry out between each watering. Desert rose is tolerant of the heavy summer rains, such as those experienced during a South Florida summer, if excellent drainage is provided. Indeed it is a popular landscape plant in countries such as Thailand, India and The Philippines with hot, wet tropical climates.

The easiest means of propagation is to take 5" leafless tip cuttings, which can then be dipped in rooting compound and placed in just moist 75/25 Perlite/Canadian peat. Mist occasionally to keep the soil barely moist until new leaves are produced. Grafting is sometimes used for valuable hybrid varieties. If the above precautions are taken to avoid root and crown rots, disease should not be a problem unless stems are damaged through exposure to low temperatures. Any flaccid stems with burnt leaves should be removed.

Desert rose grows most rapidly during the first 2-3 years, and responds well to regular applications of high nitrogen fertilizer during this period. Liquid fertilizer can be used during the dry season, when temperatures are above 80°F, on a bi-weekly basis. During the wet summer months use a slow releases fertilizer, such as a palm special, in June and again in August. As the plant matures the growth rate declines markedly, and the amount of nitrogen applied can be scaled back. The use of liquid fertilizer can be omitted for landscape plants. The only serious insect pests are scales (spider mites on some 0, and there are soil drenches that can be used if necessary. Oil based sprays should be used with great caution on desert rose, as they can damage the foliage.

Both desert rose and the Poysean hybrids are excellent subjects to include in a dry rock garden, along with other drought tolerant plants suitable for South Florida. This can also be a means of ensuring good drainage and freedom from inundation during heavy rainstorms, using rock and sand to build up a berme (flat topped bed). Both plants can be grown in containers, unglazed ceramic pots having the advantage of lessening the risk of the soil becoming too moist. For desert rose a wide dish-shaped container will allow for expansion of the caudex.

As with crown-of-thorns, growers in Thailand have developed some stunning cultivars of desert rose. Unlike the Poysean hybrids, these are not widely available locally, but are available through specialist mail order nurseries - they can be expensive. In Miami-Dade garden centers, including some of the chain stores, Poysean hybrids are usually available as well as the familiar *A. obesum* subsp. *obesum*.

Both desert rose and the Poysean hybrids are desirable plants that are as yet under utilized in the South Florida landscape. An added bonus that is worth a mention: neither plant sets viable seeds under South Florida conditions, so there is no fear of them becoming invasive. Maybe they are just too ideal to be real? Well there is in fact one slight caveat – both plants produce copious quantities of poisonous milky sap, so it is advisable to wear gloves when handling them. With all those prominent spines, you should be taking that precaution already with crown-of-thorns and its relatives. Unless you have particularly curious small children, this is insufficient reason for most of us not to check our local garden center for these plants, or search on line for mail order

nurseries. In any event please consider clipping this column and saving it in your “to do” tray as a future project to add color to your landscape.

Next time I will consider the ins and outs of turf grass – there may be other options as a groundcover.

John McLaughlin

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