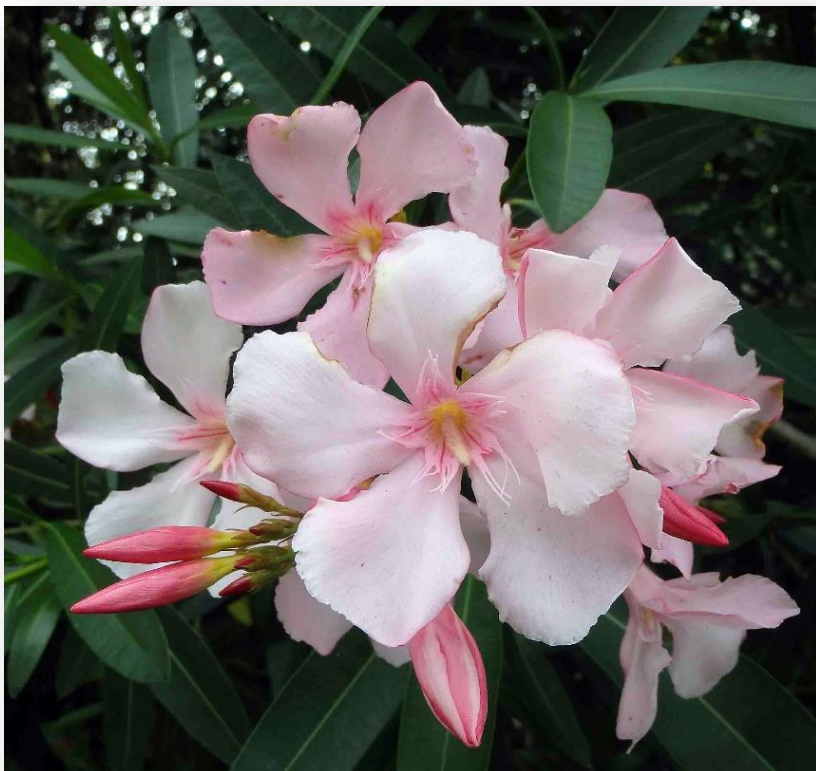


Nerium oleander

Oleander



There are few garden plants that attract bad press more than the infamous **Oleander** (*Nerium oleander*). Oleanders are tough survivors, sturdy shrubs capable of surviving temperature extremes, and, in spite of their preference for moist conditions (*Nerium* has its origins in the Greek word for water) can cope with drought, poor soil and coastal salt spray. Although Oleanders can survive in such adverse conditions, they still manage to produce prodigious numbers of flowers, seemingly throughout the year although they are most abundant in summer and autumn. Interesting that **oleander** is the only species in the genus **Nerium**. In the wild, flowers are usually pink or red, but hybridisation over many centuries has produced a range of other colours, including white, cream, salmon, orange and purple.



Oleanders have been planted since ancient times so it is almost impossible to determine their place of origin. Oleander is generally considered to have been widespread around the Mediterranean (recorded on walls of Pompei), across Iran to India, even extending to southern China

(Yunnan Province for example). For those of you who loathe Oleanders, this plant is not considered a **threatened species** because of the extent to which it has been planted in many parts of the world, including parks, gardens and along roadsides.

Everyone knows that Oleanders are poisonous. It is said that some of Alexander the Great's soldiers died after eating meat cooked on Oleander skewers. And it is true that Oleanders are toxic: every part of the Oleander is poisonous, even the pollen. **Oleandrin**, a cardiac glycoside ($C_{32}H_{48}O_9$), can cause vomiting, nausea, cardiac arrhythmia, low blood pressure, even death. Mind you, Oleander leaves are not particularly palatable (they contain more than 30 cardiac glycosides) and so are very unlikely to be eaten by animals, let alone people. On the positive side, Oleandrin can be used to treat people with heart conditions for whom digitalis (derived from Fox Gloves) is not an option.

In spite of its reputation, there seems to be little evidence of death resulting from Oleander. In fact, The Los Angeles Times, (January 13, 2004), reports the case of a woman who murdered her husband, by first feeding him Oleander leaves, and when these didn't work, spiked his **Gatorade** with **antifreeze**.



Royal Botanic Gardens, Kew: <http://www.kew.org/science-conservation/plants-fungi/nerium-oleander-oleander>

Encyclopedia of Life: <http://eol.org/pages/581314/details>

Alison Downing, Kevin Downing & Brian Atwell
Department of Biological Sciences

Monday, 8th December 2014