

## Tree Profile: *Malus Species*- Crab Apple

**General Information:** Crab Apple is a genus of about 35 species in the Rosaceae family. They are also known as wild apples, native to the temperate Hemisphere of Europe, Asia and North America. Much loved as bonsai because of their lovely spring flowers, usually white or pink and small colorful fruits in autumn. The leaves are alternately arranged, oval to elliptic and most are toothed. Styles can be single/multi trunks, semi-cascade, clumps and rafts.

**Lighting & Temperature:** Full sun for full bloom and for the fruit to set, although partial shade in midsummer is desirable in very hot areas. Provide good air circulation to discourage mildew problems. Protect from severe cold and frost.

**Watering:** Give plenty of water when fruiting or the apples will shrivel and drop. Do not mist, as this encourages mildew.

**Feeding:** Once every two weeks from early spring to flowering, feeding after flowering may cause leaf growth at the expense of fruiting. If trees are in training and vigorous growth is required at the expense of fruit, continue to feed fortnightly, otherwise cease feeding until fruit are well developed. Generally they do need cross-pollination with the exception of specially developed cultivars and set fruit in late spring to early autumn. A good dose of blood & bone in autumn promotes fruiting. To protect the vigour of the tree, it is better not to allow the tree to fruit every two or three years as fruiting weakens the tree.

**Pruning and wiring:** Fruiting and flowering can sap the plant's energy dramatically, so it is wise to limit the amount by picking off developing fruit and flower buds, especially in young bonsai. In spring prune back new shoots to one or two leaves. Trees should then be left unpruned until late summer. Pruning must be undertaken by late summer; otherwise vegetative growth is to occur rather than flower buds for next year.

If fruit are not required, remove flowers as they change over to fruit. Fruit puts stress on crab apple bonsai and should be thinned out considerably; it is recommended to rest the bonsai one year in three by removing all the fruit. Wiring should/can be done from spring through the end of autumn. It is wise to wait a few months to wire crabapples after repotting.

**Propagation:** From seeds, sow in autumn after soaking for 24 hours, they will germinate in spring, or air-layering in late spring. From root cuttings, many also sucker up from the roots, and the suckers may be separated from the roots in autumn or in the following spring from their formation.

Cuttings taken at the semi-hardwood stage in autumn - take six inch cuttings with three nodes or more and treat with a medium strength hormone. Reduce the leaf surface by cutting each leaf by one half to two thirds. This works better than the removing entire leaves.

**Repotting:** In early spring before bud burst, or in early autumn. Repot every 1-2 years in well-drained soil.

**Pests and Diseases:** Aphids, Red spider mites, caterpillars, apple scab and mildew.

### **Varieties commonly seen as Bonsai:**

***Malus sylvestris*/ Common Crab Apple** has pink-flushed white flowers followed by greenish-yellow, red-flushed fruit to 2cm across.

***Malus cerasifera*/ Nagasaki Crab Apple** is the variety most often seen as bonsai due to its prolific white flowers that are pink in bud. These in turn lead to an abundant display of red fruit in the autumn.

***Malus 'Profusion'* purple crabapple** has deep red fruit, wine-red flowers and purple leaves.

