

Hawthorn - *Crataegus sp.*

General information: This slow-growing native North American tree reaches a height of 30 feet with a rounded canopy that spreads to 35 feet or more. The dark green, deciduous leaves are often three-lobed and have red/brown undersides. The leaves display no appreciable fall color. The sparkling white, showy springtime flowers appear before the new leaves unfurl and are followed by the production of large, red-dotted fruits. The spreading, low branching habit of growth makes this best suited for planting in a large open area of turf.

There are a large number of hawthorns, and a large amount of variation within the genera. Most are small and thorn-bearing, with clusters of flowers in late spring or early summer followed by red, apple-like fruit, called haws. Another valuable feature for bonsai is the quick, fine branch ramification.

Family: *Rosaceae*

Lighting: Full sun, partial shade in the hottest part of midsummer.

Temperature: Zones 6 through 11.. Most hawthorns dislike extreme heat. Resistant to windy conditions.

Watering: Generous - do not allow the soil to dry out completely. Increase the amount of water in the summer. *C. marshalii* is an especially thirsty plant, as its native habitat is marsh, and will die if ever allowed to dry out. Hawthorn likes to be misted in dry weather, but avoid misting the flowers when in bloom. Moisture trays can be used to provide needed humidity, especially for *C. marshalii*.

Feeding: Every 14-30 days from spring-autumn, stopping for a month in midsummer. Use half-strength plant food or bonsai food.

Pruning and wiring: Prune back shoots to the first two leaves as necessary. Hawthorn grows quickly and needs constant pruning to keep under control. The best time for major branch pruning is before the leaves come in, as the intricate structure of the branches may be clearly viewed. May be wired during spring and summer. Remove faded fruits and flowers; it may be necessary to remove some of the fruit from young bonsai to prevent the plant from exhaustion.

Propagation: May be grown from seed, but will not flower until at least 20 years old, which makes cutting grown and grafted plants the better option. Needs cold treatment before sowing, and the Samsons warn that it may take up to three years for the seeds to germinate. Air-layering may be used in spring, softwood cuttings in summer, and grafting in late winter or early spring. *Crataegus laevigata* 'Paul's scarlet' rarely fruits and is usually propagated by grafting.

Repotting: Every 1-3 years in early spring or autumn. Always leave a strong root system. Up to 1/3 of the root mass may be removed if the tree is a strong grower, but hawthorns are sometimes prone to rooting problems.

Pests and diseases: Gall-forming aphids, caterpillars, powdery mildew, scab, rust, leaf blight, bacterial fireblight. May experience rooting problems.

Some species suitable for bonsai:

- *Crataegus ambigua*: Russian hawthorn, Russian thorn apple
- *Crataegus crus-galli*: cockspur thorn, hog-apple, Newcastle thorn - White 1/2 inch flowers follow the leaves in spring. It has dull red fruit which persists till the following spring, and excellent wine-red fall color. This hawthorne grows to 25 feet, with 4 inch (!!!) long thorns, and is hardy in zones 4-6.
- *Crataegus cuneata*: hawthorn, ornamental thorn, Japanese hawthorn - small lobed leaves, white flowers in spring, large fruit.
- *Crataegus douglassii*: black hawthorn - named for its black fruit, the spines are small (under 1 inch) or often absent.
- *Crataegus laevigata* (also called *Crataegus oxycantha*): English hawthorn, double-flowered hawthorn - A native of Europe, this small tree grows only to 20 feet. It has little fall color, and the fruits are not showy. Its outstanding feature is its flowers, which can be white, pink or red. Hardy in zones 5-7.
- *Crataegus laevigata* 'Paul's scarlet': double red-flowering hawthorn, Paul's scarlet thorn - a very desirable variety due to the spectacular red double-flowers. Rarely fruits, so is mainly propagated by grafting.
- *Crataegus x lavellei*: Lavelle hawthorn - A hybrid between *C. crus-galli* and *C. pubescens*. Notable for its 3/4 inch white flowers in late spring, showy orange-red fruit and bronze-red autumn color. Another advantage of this species is the lack of thorns. It grows to 20 feet, and is hardy in zones 4-7.
- *Crataegus marshalli*: parsley-leaved hawthorn - a very small tree, growing only 15-18 feet in its natural habitat, the marshy areas of Florida and Southern Georgia. Parsley-shaped leaves, exfoliating grayish-brown bark, 1/2 inch white flowers, edible yellowish-red fruit. The least hardy of the hawthorns, it is probably best to keep *C. marshalli* from freezing. Its trunk diameter rarely exceeds 4 inches in the wild. Some have reported that this tree can be sensitive after being collected, and will need special care concerning proper moisture and temperature.
- *Crataegus mollis*: downy hawthorn - a common tree in US parks and cities, this tree gets its name from the downy undersides of its leaves. It bears scarlet or crimson edible fruit with dark spots. It grows to 30 feet in the wild.
- *Crataegus monogyna*: common hawthorn, one-seed hawthorne - a commonly seen hawthorn because it is hardy and adaptable. Besides its use in bonsai, it makes an excellent hedge. Very fragrant white flowers, red haws in autumn.
- *Crataegus nitida*: glossy hawthorn
- *Crataegus phaenopyrum*: Washington hawthorn - A native of the Eastern US, this is one of the larger hawthorns at 30 feet. It has 2 1/2 inch leaves which resemble maple leaves, and orange fruit which lasts into the winter. Hardy in zones 4-7.
- *Crataegus punctata*: dotted hawthorn - Grows to 30 feet. 1/2-3/4 inch 5 petaled white flowers appear in compact, hairy clusters in late spring. Fruit is dull red to yellow with whitish dots. These fruits (nutlets) mature and fall in autumn. It is found growing in moist soils of valleys and rocky upland slopes, especially on limestone.
- *Crataegus sanguinea*: redhaw hawthorn
- *Crataegus succulenta*: fleshy hawthorn, long-spine hawthorn,

succulent hawthorn - grows to 20 feet and has bright red fruits which mature in autumn.

- *Crataegus viridis*: Winter King hawthorn, green hawthorn, Southern hawthorn - Rich green foliage, white flowers in late spring and orange-red fruit until late winter. This large hawthorn grows to 40 feet, and its spreading habit can be equally as wide. Exfoliating bark. Likes wet feet. Hardy in zones 5-8.

Bibliography:

USDA Fact Sheet ST-209

Compiled by Sabrina Caine

Edited by Thomas L. Zane