

Holly - *Ilex* sp.

General Information:

Available in both evergreen and deciduous species, holly is grown for its toothed glossy green leaves and its showy berries, which are red in most popular varieties, but can also be a showy yellow. Holly can range from under one foot to over 80, and is found in both temperate and tropical regions. Both male and female plants are needed for fruiting.

Family: Aquifoliaceae

Lighting: Can tolerate both sun and shade, although semi-shade is preferable in midsummer. Increased light tends to produce dense foliage.

Temperature: In general, evergreen varieties are hardy to zone 7, deciduous varieties to zone 5. Most varieties will require some frost protection, and all varieties should be sheltered from strong or cold winds.

Watering: Needs a fair amount of water, especially before fruit production. Holly can be badly damaged by drought. Reduce watering in winter. Likes misting, unless it is in full sun.

Feeding: Every two weeks during growth, using half strength liquid plant food, or bonsai food.

Pruning and wiring: Cut back new shoots to the one or two nodes closest to the trunk. Branches can be very brittle, so shaping is best done by pruning rather than wiring. If wiring must be done, it is best to wire in spring-summer, taking care to protect the bark. Leaf pruning to reduce leaf size is possible. Suitable for all sizes and styles, although the evergreen varieties do not take as well to broom style. *Ilex asprella* has a tendency towards horizontal growth which must be compensated for; *Ilex vomitoria*, on the other hand, has a strong inclination to grow upwards.

Propagation: Seed, cuttings, and air-layering are all possible for deciduous varieties. Evergreen varieties are best propagated through cuttings. Germination from seed requires cold pre-treatment, and seed can take up to three years before sprouting. Cuttings taken from wood grown in the current year root more easily. *Ilex vomitoria nana* may be found growing in the wild and may be collected in early Spring.

Repotting: Every 1-2 years in early spring. Use basic bonsai soil.

Pests and diseases: Pests: Caterpillars, leaf-miners, leaf spot, scale, mites and spittlebugs. The plant can also be weakened by too much fruit production, so it is wise to limit the amount of fruit on the tree. Diseases: Twig gall sometimes forms in response to a fungus infection.

Some species suitable for bonsai:

Ilex aquifolium: common holly, English holly, European holly - Commonly marketed for Christmas decorations, this holly is evergreen, and well-loved for its bright red fruits and glossy, spiny leaves. It can grow to 50 ft. in the wild. Hardy in zones 7-9.

Ilex asprella - a deciduous holly native to Taiwan. It has black bark with tiny white spots, and black, egg-shaped fruit. The ideal temperature range is between 59-64F.

Ilex attenuata: Foster's holly.

Ilex cornuta 'Rotunda': dwarf Chinese holly - a Chinese native, now popular as a hedge plant in the U.S., this *Ilex* grows to 2 ft. It bears red fruit, and has dark, somewhat rectangular leaves with three spines at the tip. Female plants can bear fruit without males. Hardy in Zone 7.

Ilex cassine: Dahoon holly - A low, shrubby tree with rough grey bark and silky shoots, the Dahoon holly is native to swampy land in the American south.

Ilex crenata: Japanese holly, box-leaved holly - an evergreen shrub that gets its name from its leaves, which cause it to be sometimes mistaken for box. The species can reach 15 ft., and thrives in zones 6-9, although cvs. may differ.

Ilex crenata 'Convexa': Japanese holly - has noticeably convex, dark green leaves.

Ilex crenata 'Mariesii': Japanese holly, dwarf Japanese holly, dwarf box-leaved holly.

Ilex crenata 'Stokes': Japanese holly - a dwarf form.

Ilex decidua: possumhaw - native to the Southeastern U.S., this plant, with its 1-3 inch lustrous green leaves and bright orange-red fruit, may grow from 10-20 ft. It is hardy in zones 5-9.

Ilex dimorphophylla: Korean holly, Okinawan holly.

Ilex glabra: inkberry, winterberry - This evergreen has tiny black berries and 1-2 inch leaves that are wide at the tip and nearly spineless. It grows to 8 ft. in a dense, upright habit. It grows in zones 5-9 and is very tolerant of a wide range of light and moisture conditions.

Ilex x meserveae: blue holly, Meserve holly - An evergreen with shiny dark bluish-green leaves on purple stems. The leaves are edged with coarse teeth, and the female plant bears brilliant red berries.

Ilex opaca: American holly - Grows to 50 ft. with 3 inch, dull green leaves. The fruits may be red, orange or yellow. Hardy in zones 6-9.

Ilex pernyi: Perny holly - A red-fruited evergreen, with yellow flowers. Hardy to zone 6.

Ilex serrata: Japanese winterberry, ume-modoki - Hardy to zone 5, this deciduous holly has red fruit and lavender to white flowers.

Ilex serrata 'Leucocarpa': white-berried Japanese deciduous holly.

Ilex serrata 'Ohwi' (Koshobai).

Ilex serrata sieboldii: deciduous holly - produces a large quantity of red to coral colored fruit.

Ilex serrata 'Sparkleberry'.

Ilex serrata 'Subtilis' ('Koshobai'): Japanese deciduous holly - a very small form, suitable for only the smallest sizes.

Ilex serrata: finetooth holly.

Ilex verticillata: black alder, winterberry - This 8 ft. shrub has red-orange berries that last well into winter. The dull green, spineless leaves turn yellowish in fall.

Ilex verticillata 'Red Sprite'.

Ilex vomitoria: Yaupon holly - This upright, spreading small evergreen tree or large shrub, capable of reaching 15 to 25 feet in height with a similar spread, has small, grey-green, oval shaped leathery leaves densely arranged along smooth, stiff, light grey branches. Plants in the landscape require about 10-years to develop a distinct vase-shape. Sometimes clipped into a tight hedge, Yaupon Holly is ideal for training into a small tree with lower branches removed to reveal the interestingly-contorted multiple trunks. It can also be used for topiaries, espaliers, specimens, screens, or barriers. The non-showy male and female flowers appear on separate plants and are followed on the female plants by the production of brilliant red berries (yellow on some cultivars) which are quite attractive to wildlife. The flowers attract bees for several weeks. Purchase plants with berries on them (females) if you want a berry-producing plant, or buy trees which were propagated from cuttings of female plants. Tolerates a wide range of light and moisture conditions. Native Americans drank a tea made from the dried leaves of this plant; however, if tea is made from fresh leaves it induces severe gastric distress, hence the botanical name!

Ilex vomitoria nana: dwarf Yaupon holly.

Bibliography:

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