

Cephalotaxus harringtonia (Knight ex J. Forbes) K. Koch

Japanese Plum-Yew

(*Cephalotaxus drupacea*, *Cephalotaxus koreana*, *Cephalotaxus nana*, *Cephalotaxus sinensis*, *Taxus harringtonia*)

Other Common Names: Assam Plum-Yew, Cow's-Tail-Pine, Harrington Plum-Yew, Plum-Fruit-Yew, Inugaya.

Family: Taxaceae; sometimes further segregated into the Cephalotaxaceae in which case it is a monogeneric family.

Cold Hardiness: Suitable for use in USDA plant hardiness zones 6 (5b) to 9, however *C. harringtonia* is often planted into zone 5 where it suffers damage or is killed unless located in a very protected spot.

Foliage: Alternate evergreen strap-like 1" to 1½" (2") long lanceolate needles are held in two ranks on tiny yellowish petioles which angle horizontally up the stem then sharply diverge to present the needles at essentially a 45° angle from the twigs; small ridges flow down the twigs from the bases of the petioles; needles are a dark lustrous green above with an often lighter green main vein which is raised both above and beneath; the underside of the needle is a lighter green to grayish green in color; the stiff needles terminate in a cuspidate to sharply acuminate yellow to green tip.

Flower: A dioecious species, profuse production of pollen occurs in mid-spring from pendent clusters of creamy yellow soft male pollen cones beneath the twigs; male pollen cones are noticeable, but not particularly ornamental; female cones are aesthetically inconsequential small globose green knobs on short stalks at the base of the most recent year's twigs.

Fruit: Like all gymnosperms, *C. harringtonia* does not produce a true botanical fruit, but rather a small naked fleshy covered seed which superficially resembles a tiny green, sometimes with a striated appearance, 1" or less long plum or olive that is brown at maturity, hence the name Japanese Plum Yew; it is reportedly edible and grown as a food crop in Japan, caution is urged as many members of the family Taxaceae are poisonous and an error in identification could be harmful.

Stem / Bark: Stems — stiff twigs are straight to arching, producing two ranked single needles which vary from about a 45° above to horizontal relative to the plane of the twigs; green to yellow-green, twigs become mottled with gray to gray-brown as they begin to mature; Buds — tiny, mostly hemispherical, and green; Bark — the gray bark exfoliates in strips at maturity.

Habit: Japanese Plum Yew is a medium size evergreen shrub to rarely a small tree, typically maturing in the range of 5' to 10' (25') tall with an equal or greater spread; although some individuals of the species type are more upright in growth habit, most cultivars in the U.S. trade form arching mounds of branches that are twice or more wide than high; for most cultivars initially stems sucker erectly from the base of the plant, with horizontal oriented growth dominating thereafter; growth rates are very slow and the overall texture of *C. harringtonia* is medium.

Cultural Requirements: While better adapted to the heat of the southern U.S. than most commercial cultivars of *Taxus*, *C. harringtonia* is naturally an understory plant which still requires a loose well drained fertile neutral to acidic soil and high quality irrigation water to perform well in our region, in addition to partial to moderate shade; in more mesic climates, irrigation may not be required; its slow growth requires that gardeners acquire patience or purchase fairly large specimens initially which are typically not inexpensive; little pruning is required to maintain a dense habit, however *C. harringtonia* will accept pruning or shearing fairly well and can be shaped into formal hedges, although this obscures the natural beauty of this plant's gracefully mounding form.

Pathological Problems: Scale insects may require repeated control measures in some instances.

Ornamental Assets: The primary assets are the dark glossy evergreen needles on shrubs that will respond to pruning similarly to the yews and tolerate the heat of the southern U.S., hard to find attributes; Japanese Plum Yews are reportedly non-preferential as deer browse.

Limitations & Liabilities: Growth is slow and plants tend to need a hospitable shady spot with moist soils and a source of high quality irrigation water; older stems may hold dead needles in the interior of the plant, which could present problems if substantial renewal pruning is required.

Landscape Utilization: Japanese Plum Yew can serve as a substitute for the low spreading cultivars of *Taxus* for the southern U.S.; plants will accept some shaping and can be shorn into formal hedges if needed; essentially, *C. harringtonia* is a general purpose evergreen for shaded sites with good quality neutral to acidic soils and adequate irrigation.

Other Comments: A species which is on the rise in the U.S. landscape trade and it has picked up steam in recent

years, however *C. harringtonia* has still not hit the mass market in a big way, probably due to its relatively slow growth and lack of major flowering assets; nice specimens can be observed in the eastern portions of Texas from Dallas to Houston, but fewer nice plants are evident as one moves westward; the genus name derives from the Latin names for head, cephalos, and yews, *Taxus*; the specific epithet honors the Earl of Harrington who helped to popularize this plant in Europe.

Native Habitat: *Cephalotaxus harringtonia* is native to East Asia, in the strict sense from Japan, if viewed as a broader more inclusive species consisting of several varieties, then Japan, Korea, China, and parts of Southeast Asia.

Related Taxa: This species was originally placed in the genus *Taxus* L. when first described and later moved to a separate genus; the taxonomy of the genus *Cephalotaxus* P. Von Siebold & J. Zuccarini is rather murky with some authorities tending to lump the majority of the taxa into a few encompassing species, while others divide the group into several species; 'Fastigiata' is a stiffly upright form.

References: Dirr, 2002; Krussmann, 1983; Tripp and Raulston, 1997; van Gelderen, 1996 Wyman, 1969.

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