

## Japanese White Pine - *Pinus parviflora*

**General information:** Japanese White Pine creates a striking landscape element wherever it is used. Often seen as a dense, conical form when young, Japanese White Pine develops into a 25 to 50-foot-tall, graceful, irregularly-shaped tree, with an equal or greater spread, and a broad, flattened canopy. The 1 to 2.5-inch-long needles are stiff and twisted, forming blue/green tufts of foliage at branch tips, and creating an overall fine texture to the tree's silhouette. The brownish-red cones are one to four inches long and persist on the tree for six to seven years. The needles grow in groups of five, so this tree is also known as "five-needle pine", especially the cultivar *P. pentaphylla*.

**Family:** *Pinaceae*

**Lighting:** Full sun.

**Temperature:** Zone 4B to 7A. Northern climates, will not grow in southern USA.

**Watering:** As with other pines, good drainage is essential.

**Feeding** Simon and Schuster's recommends feeding once a month from early to late spring and from end of summer to late autumn with a slow-acting organic fertilizer, and applying chelated iron 2-3 times per year.

If you prefer to use chemical fertilizers, feed every other week during the same times with a half-strength solution of a fertilizer for acid-loving plants, such as Miracid. You may wish to alternate with a balanced fertilizer such as Peter's 20-20-20 depending on the acidity of your soil mix.

**Pruning and wiring** The root system should be pruned gradually in the course of repotting, so as to always leave a strong root system. Branch pruning and wiring should be done in late autumn, and the wire left on the tree for 6-8 months at most. Pinch new shoots in spring to 1/3 of their length.

Every 1-2 years it is possible to remove all of the new shoots in late spring, if the tree is healthy and well-fed. This will result in buds forming in the fall at the sites where the shoots were removed. The reason this might be done is to form very short internodes on the branches.

**Propagation:** Seeds, layering.

**Repotting:** Repot every 2 or 3 years for young trees (up to 10 years) or every 3 to 5 years for older trees. Repotting can be done in spring before the candles open or in late summer or early autumn, after the heat of summer has passed. These are the two periods of greatest root growth in pines.

Because of the rugged quality of the five-needle pine, a strong rectangular pot should be used. Pines need a deep root system, and five-needle pines especially need a deep pot to avoid uprooting by wind, due to their dense foliage. Simon and Schuster's recommends 50% soil, 10% peat, and 40%

coarse sand. Rémy Samson recommends 1 part leaf mould, 1 part loam, and 1 part coarse sand. Peter Chan recommends 3 parts coarse sand, 1 part peat, and 1 part loam.

Pines and other conifers grow in association with a symbiotic fungus which grows in the root ball of the tree. If this fungus is not present, the tree may die. For this reason, pines and other conifers should never be bare-rooted, unless steps are taken to re-introduce the fungus to the repotted plant, such as making a slurry (thin mud) of the old soil and pouring it over the newly potted soil.

Some experts feel that it is more important to be sure that the tree always has a healthy root system with sufficient feeder roots than to worry about symbiotic fungi. They feel that trees are more likely to die from having their root systems reduced too much at once than from not having the fungus present. Certainly it is good advice in any case to be sure the tree has sufficient roots.

**Pests and diseases:** Aphids, mealy bug & red spider mites, to name a few.

**Bibliography:**

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