

Tsuga canadensis

From Wikipedia, the free encyclopedia

Kingdom:	Plantae	<i>Tsuga canadensis</i> , also known as Eastern or Canadian Hemlock, and in the French-speaking regions of Canada as Pruche du Canada, is a coniferous tree native to eastern North America. It ranges from northeastern Minnesota eastward through southern Quebec to Nova Scotia, and south in the Appalachian Mountains to northern Georgia and Alabama. Scattered outlier populations occur in several areas east and west of the Appalachians. It is the state tree of Pennsylvania.
Division:	Pinophyta	
Class:	Pinopsida	
Order:	Pinales	
Family:	Pinaceae	
Genus:	<i>Tsuga</i>	
Species:	<i>T. canadensis</i>	

The eastern hemlock grows well in shade and is very long lived with the oldest recorded specimen being at least 554 years old. The tree generally reaches heights of about 31 metres (100 feet), but exceptional trees have been recorded up to 53 metres (173 feet). The diameter of the trunk at breast height is often 1.5 metres (5 feet), but again, outstanding trees have been recorded up to 1.75 meters (6 feet). The trunk is usually straight and monopodial, but very rarely is forked. The crown is broadly conic, while the brownish bark is scaly and deeply fissured, especially with age. The twigs are a yellow-brown in colour with darker red-brown pulvini, and are densely pubescent. The buds are ovoid in shape and are very small, measuring only 1.5 to 2.5 mm (0.05 to 0.1 inches) in length. These are usually not resinous, but may be slightly so. The leaves are typically 15 to 20 mm (0.6 to 0.9 inches) in length, but may be as short as 5 mm (0.2 inches) or as long as 25 mm (1 inch). They are flattened and are typically distichous, or two-ranked. The abaxial surface of the leaf, or underside, is glaucous with 2 broad and clearly visible stomatal bands, while the adaxial surface, i.e. the upper-side, is a shiny green to yellow-green in colour. The leaf margins are very slightly dentate, or toothed, especially near the apex. The seed cones are ovoid in shape and typically measure 1.5 to 2.5 cm (0.6 to 1 inch) in length and 1 to 1.5 cm (0.4 to 0.6 inches) in width. The scales are ovate to cuneate in shape and measure 8 to 12 mm (0.3 to 0.5 inches) in length by 7 to 10 mm (0.3 to 0.4 inches) in width. The apex is more or less rounded and is often projected outward. 24 diploid chromosomes are present within the tree's DNA.



Tsuga canadensis has long been a popular tree in cultivation. The tree's preference for partial shade and tolerance of full shade allows it to be planted in areas where other conifers would not easily grow. In addition, its very fine textured foliage that droops to the ground, its pyramidal growth habit and its ability to withstand hard pruning make it a desirable ornamental tree. In cultivation it prefers sites that are slightly acidic to neutral with nutrient-rich soil that is moist but well-drained.

Make extremely graceful evergreen hedges of value in almost any situation except city conditions; excellent for screening, accent plants, and foundation planting; the most commonly planted of the hemlocks, popular over wide area; one of our best evergreens.