

*Pseudotsuga menziesii*

[Synonyms : *Abies douglasii*, *Abies douglasii* var. *fastigiata*, *Abies douglasii* var. *pendula*, *Abies douglasii* var. *taxifolia*, *Abies drummondii*, *Abies menziesii*, *Abies mucronata*, *Abies mucronata* var. *palustris*, *Abies obliqua*, *Abies obliquata*, *Abies standishiana*, *Abies taxifolia*, *Abies taxifolia* var. *pendula*, *Abietia douglasii*, *Abietia douglasii* var. *fastigiata*, *Abietia douglasii* var. *pendula*, *Picea douglasii*, *Pinus douglasii*, *Pinus douglasii* var. *brevibracteata*, *Pinus douglasii* var. *pendula*, *Pinus douglasii* var. *taxifolia*, *Pinus taxifolia*, *Pseudotsuga douglasii*, *Pseudotsuga douglasii* forma *compacta*, *Pseudotsuga douglasii* forma *globosa*, *Pseudotsuga douglasii* var. *laeta*, *Pseudotsuga douglasii* var. *pendula*, *Pseudotsuga douglasii* var. *viminalis*, *Pseudotsuga douglasii* var. *viridis*, *Pseudotsuga menziesii* var. *menziesii*, *Pseudotsuga menziesii* subsp. *viridis*, *Pseudotsuga mucronata*, *Pseudotsuga mucronata* var. *elongata*, *Pseudotsuga mucronata* var. *palustris*, *Pseudotsuga taxifolia*, *Pseudotsuga taxifolia* var. *brevibracteata*, *Pseudotsuga taxifolia* forma *compacta*, *Pseudotsuga taxifolia* var. *elongata*, *Pseudotsuga taxifolia* forma *fastigiata*, *Pseudotsuga taxifolia* forma *globosa*, *Pseudotsuga taxifolia* subsp. *mucronata*, *Pseudotsuga taxifolia* var. *palustris*, *Pseudotsuga taxifolia* var. *pendula*, *Pseudotsuga taxifolia* var. *viminalis*, *Pseudotsuga taxifolia* subsp. *viridis*, *Pseudotsuga vancouverensis*, *Tsuga douglasii*, *Tsuga douglasii* var. *fastigiata*, *Tsuga douglasii* var. *pendula*, *Tsuga menziesii*]

**DOUGLAS FIR** is an evergreen tree. Native to western North America it has needle-like leaves and small nearly cylindrical cones.

It is also known as Alpine hemlock, Black fir, Blue Douglas fir, British Columbia Douglas fir, British Columbian pine, Canadian Douglas fir, Coast Douglas fir, Colorado Douglas fir, Columbian pine, Common Douglas fir, Cork-barked Douglas spruce, Douglas, *Douglasfichte* (German), *Douglasgran* (Danish, Swedish), *Douglasie* (German), *Douglaska tisolistá* (Czech, Slovak), *Douglaskuusi* (Finnish), Douglas pine, Douglas spruce, *Douglastanne* (German), *Ffynidwydden Douglas* (Welsh), Fir, Golden rod fir, Gray Douglas fir, Green Douglas fir, Grey Douglas fir, Inland Douglas fir, Interior Douglas fir, *Kialatsilo* (Zuni North American Indian), Montana fir, Oregon Douglas fir, Oregon fir, Oregon pine, Oregon spruce, Pacific Coast Douglas fir, Patton's hemlock, *Pseudotsuga* (Portuguese), Puget Sound pine, Red fir, Red pine, Red spruce, Rocky Mountain Douglas fir, Santiam quality fir, *Sapin de Douglas* (French), Spruce, Yellow Douglas fir, Yellow fir, and Yellow national fir.

Although the common names of this tree use the words 'pine' and 'fir' botanically it is neither. Balsam (known as 'Oregon balsam') is extracted from the trunk.

Warning – prolonged contact with the wood may cause dermatitis.

*Menziesii* commemorates the name of a Scottish naval surgeon, botanist and plant collector, Archibald Menzies (1754-1842). After serving as an assistant surgeon in Wales, he joined the Royal Navy. For his first posting he was based for four years as an assistant surgeon on the Halifax Station (Nova Scotia) which enable him to study the local flora particularly. This period led to his introduction in 1786 to Sir Joseph Banks (who was President of the Royal Society and Director of Kew Gardens). His next appointment (as surgeon) on HMS *Prince of Wales* took him on a 3 year world voyage to the North

Pacific during which he sent plants home and after which he was congratulated upon the health of the ship's crew. Both aspects appear to have been relevant in the British Government's decision to appoint him in 1790 as naturalist on HMS *Discovery* when she made her five year circumnavigation of the world under the captaincy of the English navigator Captain George Vancouver (1757-1798). During this voyage Vancouver carried out survey work in Australia and New Zealand and then went on to chart some of the western North American coastline as well – but one wonders whether Menzies' brief from the Government was not the more arduous one particularly as too he replaced the appointed surgeon who had to return home after falling ill. He was required to study the natural history (flora and fauna) of the countries visited, collect dried specimens and seeds, grow any significant plants in a special glass frame supplied on board ship that could not be propagated from seed, assess the viability of European plants in those countries, collect mineral samples, and keep notes on the activities of natives – their customs, clothing, artefacts, language – all with a view to the possibility of sending settlers out from England in the future. At the end of the voyage he was again congratulated on the health of the crew. On his return to England he was posted to the Caribbean and when he retired from the Service he set up a practice in London as a doctor and surgeon. Apart from many plants being named after him, Menzies' name was also given to Menzies Bay and Menzies Point on Canada's western coast and Vancouver itself and Vancouver Island were named after George Vancouver.

- The common name Douglas commemorates a Scottish botanist David Douglas (1798-1834). He collected plants in North America for the London Horticultural Society and in 1827 amongst others he sent back seeds of this species. The seeds were planted the following year and the trees that grew from them still exist today. (David Douglas, who also had the Douglas squirrel named after him, eventually met a tragic death on a collecting expedition in the Hawaiian Islands when he was gored by a wild bull.)
- The Hopi North American Indian tribe in the American south-west held the Douglas fir in high regard. Its branches played an important role in much of the tribe's ceremonial ritual – as they did in that of the Havasupai and Isleta tribes as well. In addition to the branches' functions in Tewa ritual this tribe put twigs in their headdresses, while the Keresan used Douglas fir for making their prayer sticks, dancers' costumes and other ceremonial articles. At puberty boys and girls in the Thompson tribe used the boughs in a special ceremony that recognized them as a good luck charm. For the Zuni tribe the tree was closely associated with rain and was earnestly invoked during rain ritual.
- Paiute Indians used small branches to flavour bear meat as it was barbecued, and both the Shuswap and Thompson tribes valued the sap as a sweetener. Some of the Apache Indians and also the Gosiute tribe chewed the pitch like gum. While Yurok and Karok Indians made a tea from the young shoots, the Yuki, Montana Indian and Round Valley Indian tribes all used the leaves to make a kind of coffee.
- Both the Thompson and Paiute tribes spread boughs for bedding or flooring, and the Round Valley Indian tribe cut small branches to light as fishing torches. The strong hard wood was used for dugout canoes by the Klamath tribe. It was also used for building the Thompson summer lodges, and for general construction by the Montana Indian tribe. It provided material for Thompson snowshoe frames and when rotten was burnt by them for smoking hides. Quite a few tribes made various tools and weapons from Douglas fir wood – some of the Salish soaked the knots and formed them into fish hooks, while the wood was used by the Haisla to make fish rakes. Thompson Indians made cooking tools, and fishing and hunting tackle from it. The Blackfoot Indians' bows were made from it, and the Klallam used the wood for their harpoon shafts and spears. The Oweekeno, some of the Pomo, the Kitasoo and Klallam tribes all used the wood for fuel. The bark was also

viewed as suitable fuel by some of the Salish, the Bella Coola and Hesquiat Indians (and the Klallam too) – and the Hesquiat tribe also burnt the branches.

Small roots provided basketry material for the Round Valley Indian tribe. The pitch was used for caulking canoes and water vessels by several tribes, including the Thompson and some of the Salish, while others such as the Hanaksiala, some of the Pomo and the Haisla all valued it as a kind of glue.

The tree was also a source of medicine for quite a few North American Indian tribes including the Havasupai and the Haisla. Kwakiutl Indians used it to ease diarrhoea, some of the Apache prescribed it for coughs, and the Hanaksiala turned to it for stomach upsets, sore throats and period problems. Venereal disease was treated with it by both the Montana Indian tribe and some of the Pomo, and some of the Okanagan-Colville used it as a remedy for urinary disorders. It was a treatment for paralysis in the Isleta tribe, and some of the Okanagan-Colville and the Thompson tribe chose it for kidney ailments. The latter also used it for treating fluid retention. Both the Thompson and Karok Indians used it to ease colds, the Thompson and Kwakiutl tribes applied it to various skin disorders, and it was a treatment for rheumatism among the Montana Indian tribe, some of the Pomo tribe, the Thompson, some of the Okanagan-Colville and the Isleta tribe. Not least Thompson Indians also took it as a tonic and chewed peeled plant tops as a breath freshener.

The diversity of use so far displayed makes it hardly surprising that the Navajo Indians considered the tree to be a ‘cash crop’ which they bartered with other tribes for corn or meal.

In 1895 in British Columbia (Canada) 133 million Douglas firs were felled. In the 1960s the tree provided 25% of sawn timber in the United States (double that of any other tree).

The North American West has also used it (young and symmetrical) as a Christmas tree.

Although according to authorities this light yellow to red wood has been used primarily for construction, railway sleepers, building cladding and interiors, telegraph and flag poles, furniture and fencing, it has also been used for flooring. In addition it provides material for the manufacture of plywood and pulp – and when treated it has been used in dock construction and shipbuilding (not least cruisers).

The bark is still used for tanning.

At the end of the 1950s the Province of British Columbia presented the Royal Botanical Gardens at Kew in England with a new 190 ft. flag pole. It was made from the trunk of a 370 year old tree and given in commemoration of the Province’s centenary in 1958 and the Garden’s bicentenary in 1959.

Locally a tea is occasionally made from the leaves.

Douglas fir has been a state emblem of Oregon in the United States since 1939.

There are two douglas firs in Scotland that are now vying for the honour of ‘tallest tree’ in the British Isles. The one in Perthshire which has long held this title is 213 ft. in height and no doubt to its chagrin is matched by a douglas fir found at the end of the 19<sup>th</sup> Century/beginning of the 20<sup>th</sup> Century in Argyllshire.