## Himalayan Cedar

## Cedrus deodara

What's in a name? The word *cedar* is used for a wide range of conifers, including many in the Cypress family (Cupressaceae) and even for some flowering plants, such as the Australian Red Cedar (Toona australis) and White Cedar (Melia azedarach), so the four species of Cedrus (Pinaceae, Pine family) are often referred to as True Cedars. The Himalayan Cedar, Cedrus deodara occurs in the western Himalaya in the north of the Indian subcontinent, but C. atlantica, the Blue Atlantic Cedar and C. brevifolia are found in the mountains of the western Mediterranean, and C. libani, the Cedar of



Lebanon, in the mountains of the eastern Mediterranean.

Himalayan Cedars, or Deodars, as they are often called, are magnificent trees, growing up to 50 metres high in their natural habitat, and with trunks up to 3 m in diameter. They have been planted in parks and gardens worldwide, treasured for their elegant drooping branches and blue-green needles. They come from the western Himalayas and southern slopes of the Hindu Kush, in eastern Afghanistan, southwestern Tibet, western Nepal, northern Pakistan and India where they grow in



Distribution of *Cedrus* species, from: MPF, CC BY-SA 3.0 <a href="https://creativecommons.org/licenses/by-sa/3.0">https://creativecommons.org/licenses/by-sa/3.0</a>, via Wikimedia Commons

association with pine, yew, spruce, fir, oak, *Rhododendron*, maple, hazelnut, chestnut and birch – sounds rather like an arboretum. It is the national tree of Pakistan, and the trees, particularly those of the Devdar Forest of India's Himachal Pradesh Province, are revered by Hindu. The name *deodara* comes from the Sanskrit – *Deva* - god, and daru – tree.



Deodars, like most conifers, are *monoecious*, that is, each tree bears separate male and female cones. The relatively short-lived male pollen cones are often abundant on the lower branches; female cones are produced on upper branches and take two years to grow to maturity. Leaves are stiff and needlelike, and live for 3 - 6 years.



Houseboats on Dai Lake, Srinagar. Photo: Madhumita Das, CC BY-SA 4.0 <a href="https://creativecommons.org/licenses/by-sa/4.0">https://creativecommons.org/licenses/by-sa/4.0</a>, via Wikimedia Commons

The timber is used extensively for building as it is rot-resistant and its fine, close grain makes it ideal for polishing. Traditionally the timber was temples for and used their surroundings. The legendary houseboats of Srinagar were built with deodar. The British used the timber for bridges, railway carriages, barracks and public buildings, but in spite of its durability, the timber is exceptionally strong enough brittle. not for furnishings or construction where strength is needed.

The aromatic inner wood is used for incense and distilled to produce an anti-fungal, insect repellent essential oil. This is used on the feet of livestock, especially cattle, camels and horses. In some areas of Himachal Pradesh, storage rooms for spices, meat, wheat and oats are constructed from deodar timber for its anti-fungal and insect repellent qualities. Cedar oil is also popular in soap, facewash and



Cedar Wood. Photo: Androstachys, Public domain, via Wikimedia Commons

face cream. Large quantities of the flavonoid (a polyphenol) *taxifolin* are found in the bark. This has shown promising pharmacological activities in the management of several conditions.

The Gymnosperm Database: <u>https://www.conifers.org/pi/Cedrus\_deodara.php</u> The Gymnosperm Database: <u>https://www.conifers.org/pi/Cedrus.php</u> Wikipedia: <u>https://en.wikipedia.org/wiki/Cedrus\_deodara</u> Wikipedia: <u>Taxifolin - Wikipedia</u> Sunil C. Xu B-L 2019. An insight into the health-promoting effects of taxifolin (dihydroguercetin)

Sunil C, Xu B-J. 2019. An insight into the health-promoting effects of taxifolin (dihydroquercetin), *Phytochemistry* 166: 112066, ISSN 0031-9422, <u>https://doi.org/10.1016/j.phytochem.2019.112066</u>

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