

TREE PROFILE

Corporación Ambiental La Pedregosa

Common Name: Aceite	Scientific Name: <i>Copaifera pubiflora</i>	Family: <i>Caesalpinaceae</i>
Region: Colombia, Venezuela, Guyana, Brazil and the Amazon basin	Size: Up to 20 meters tall and with a trunk diameter of up to 1 meter	Habitat: Grows in Gallery Forests, Savannahs and Urban areas
Leaves: Paripinnate, helicoidal, alternate, 2 to 3 leaflets	Bark: Smooth, yellow to orange	Phenology: Flowers in Nov. and Dec., seeds in Feb. and March
Basic Density: 0.75	Foliage: Emerald green, lustrous	Propagation: By seeds

Uses: The Aceite tree is readily recognized for its yellow to orangey bark that stands out in the gallery forest. Oil can be tapped from the trunk like syrup from a maple tree and is combustible. It can be used in diesel engines and there have been biofuel experiments with this species. This and the fact that the tree is considered highly medicinal and its wood perfect for fine furniture use has led to over exploitation. Other uses include construction lumber, firewood and artisanal use. The tree also produces a fibre that was traditionally prized for its strength when used in construction. As a medicine, the oil has been applied to disinfect and help heal wounds in both humans and livestock. The tree is used as an ornamental and for shade in urban areas of Colombia and Venezuela.



Aceite tree in Vichada



Aceite seeds and their seed pods

Growth: Despite the fact the Aceite has dense wood, this hardwood tree seems to have fairly fast growth, making it a promising candidate for plantation use. Trunk diameters of 30 cm have been observed in trees that are only 5 years old. Combine this relatively fast growth with the fact the tree is tolerant of both inundation forest and well-drained savannah settings, and it could be of significant economic value if cultivated. A study in Venezuela indicated that the tree was comfortable with higher densities, but that the tree needs distance from others in order to mature. It was observed that other Aceite in close proximity to a mature tree were not very old. The seeds are relatively easy to collect, and can often be found far from the parent tree thanks to bats, which leave the seeds in their *guano*. It seems to help to sand the seeds lightly in order to improve germination percentages. Once germinated, the seedlings show rapid development in a tree nursery and can be planted within 3 months of germination.

Pressures: *Copaifera pubiflora*, similar to other valuable native tree species, has suffered from logging without replanting. Due to its exquisite yellow bark, it has seen some planting in urban areas as an ornamental tree, but the only plantation cultivations of Aceite in Vichada are those that have taken place at La Pedregoza, as part of the *Proyecto Vida Silvestre*, funded by Ecopetrol and coordinated by WCS Colombia. There continues to be logging of the tree from natural forests due to its fine wood, which can be used for special furniture and arts and crafts. Using Aceite for its oil seems to be a good reason to promote its planting and may help the species in the long term.



Aceite seedlings in La Pedregoza nursery



Aceite seeds being examined

Recommendations: The conservation of this tree in the Orinoquia is important as a food source for local fauna. Seeds are spread by ants and by mammals like tapirs and bats. Due to the wood's fine grain it is a promising forestry species and that could replace introduced plantation trees. Its tolerance for various growing conditions could offer some solutions for the economic use of low lying areas. Given the planet's dependence on fossil fuels, the tree could also provide local people with a renewable fuel source. The tree's many medicinal uses suggest that further studies are required. At *La Pedregoza* we are dedicated to learning how best to cultivate and conserve this amazing and beautiful tree.



The La Pedregoza Environmental Corporation is a non-profit NGO dedicated to the conservation of native species in the Orinoco River basin, and the administrator of the La Pedregoza Natural Reserve. We welcome individuals and businesses who would like to assist us in the conservation and protection of native tree species and other Orinoco flora and fauna. For more information please contact us at trees@pedregoza.org

La Corporación Ambiental La Pedregoza es una ONG sin ánimo de lucro, dedicada a la conservación de especies nativas de la cuenca del Río Orinoco y administradora de la Reserva Natural de la Sociedad Civil La Pedregoza. Se da la bienvenida a personas y empresas que deseen ayudar en la conservación y protección de árboles nativos y otras especies en la Orinoquía. Para más información contacte a arboles@pedregoza.org