

MESQUITE

Algarroba, Chilean Mesquite

Prosopis chilensis

Fabaceae

ECHO® PLANT INFORMATION SHEET

Description

Prosopis chilensis is a small to medium sized tree up to 12 m in height and 1 m in diameter; bark brown, fissured; spines a pair, stout, yellow, glabrous; root system reportedly shallow and spreading. The leaves are compound, each with numerous leaflets along several pairs of pinnae. *P. chilensis* has 10-29 leaflets per pinnae and no more than two pairs of pinnae per leaf. The leaflets are about 1 cm apart. The flowers are greenish-white to yellow, abundant and occur in spike-like racemes. The pods are beige to off-white, about 15 cm long and 15 mm wide. The pods have a tendency to be rolled up along the axis. Seeds many, bean-shaped, oblong, 6-7 mm long, flattened, brown, each in 4-angled case.¹

Origin

South America

Uses

P. chilensis is a nitrogen fixing tree and good for soil improvement, erosion control and soil stabilization.

It is mainly used for firewood, charcoal, cabinet wood, and nectar for honeybees.

The pods can be used as fodder and human food.²

Common Names

- Spanish
 - Algarroba
 - Algarrobo Blanco

Cultivation

- **Elevation** – up to 1500 m in the tropics and subtropics
- **Rainfall** – minimum of 350 - 400 mm
- **Soil Types** – loam or sand
- **Temperature Range** – -5 to 45° C
- **Day Length Sensitivity** – Not a significant factor
- **Light** – Prefers full sun

P. chilensis trees are usually started in a tree nursery and transplanted into the field after approximately one year. They can be planted at 1.5 to 3 m spacings for maximum biomass production.²

Harvesting and Seed Production

The pods are harvested when mature (when they have turned beige to off-white and feel dry).

Seeds are difficult to extract from the gummy pulp. Prosopis pods can be ground in a meat grinder after drying pods in an oven at 52°C overnight, which will also serve to scarify the seeds. For good germination seeds require scarification of the seed coat with a file or knife.²

Pests and Diseases

Twig girdling insects (*Oncideres* spp.) cause minor damage to these trees. An undescribed "disease" causes the terminal shoots to die. Over a period of years this necrosis gradually spreads downward and eventually may kill the entire tree. *P. chilensis* can become weedy in heavily grazed areas.²

Cooking and Nutrition

The pods can be eaten as a sweet, used as as base for a drink, or ground into flour.

References

¹http://www.worldagroforestry.org/treedb/AFTPDFS/Prosopis_chilensis.PDF

²http://factnet.winrock.org/fnrm/factnet/factpub/FACTSH/P_alba.html

https://www.hort.purdue.edu/newcrop/duke_energy/Prosopis_chilensis.html#Cultivation

<http://ecocrop.fao.org/ecocrop/srv/en/dataSheet?id=8946>