

# NONI

Indian Mulberry

*Morinda citrifolia*

Rubiaceae

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## ECHO® PLANT INFORMATION SHEET

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### Description

Noni is a small evergreen tree growing 3-8 m tall with bright green, glossy leaves. Trunks of mature trees are 15 cm wide, supported by extensive lateral roots and a deep taproot. Tubular, greenish white flowers are self-pollinating, resulting in green to yellow fruits up to 12 cm long and nearly white at harvest. Ripe fruit have a strong, rancid odor with bitter, gelatinous pulp containing triangular, reddish-brown pits. Inside each pit are four 3-9 mm long, brown seeds with an air sac at one end that enables them to float and be dispersed via ocean currents. Noni is native to Southeast Asia but has spread to many parts of the tropics.

### Uses

Most parts of the noni tree have medicinal properties and are used for a wide variety of ailments (*some sources mention unsafe uses; exercise caution and seek advice from a physician in using noni and other plants for medicinal purposes*). The leaves produce a red dye and the root bark makes a yellow dye. The fruits are edible. The wood is used for fuel and poles. Noni is a pioneer species, useful for reforestation of disturbed land.

### Common Names

- French
  - murier indien
- Spanish
  - Mora De La India

### Cultivation

- **Elevation** - Up to 1500 m
- **Rainfall** - 700-4200 mm/year; 1500-3000 mm/year optimal
- **Soil Types** - wide range but prefers well-drained sandy soil with pH 4.3-7 (5-6.5 is best)
- **Temperature Range** - 12-36°C; 24-30°C optimal
- **Day Length Sensitivity** - grows under short days (<12 hours) in the tropics
- **Light** - prefers full sun, but can grow in semi-shade

Noni can be propagated from seeds or cuttings. Seeds germinate in 3 to 9 weeks. Nicking the seed coat or soaking them in hot water (40°C) can improve germination. Sow seeds in nursery beds. If using cuttings, select woody stem material with actively growing tips. When transplanting seedlings or rooted cuttings to their final location, aim for a spacing of 4 X 4 m. Water as needed until established, after which the trees can withstand long dry periods. Noni is also tolerant of saline and infertile soil. It is considered invasive in some areas.

### Harvesting and Seed Production

Flowering and fruiting start the third year after planting and occur throughout the year. At ambient temperature, fruits ripen within about a week after harvesting. They should be used soon after harvesting to avoid spoilage. For seed-saving purposes, collect seeds from mature, ripe fruit and dry them in the shade for 3 to 4 days. Seeds stored at room temperature are viable for up to six months.

### Pests and Diseases

Noni trees are susceptible to root knot nematodes.

### Cooking and Nutrition

Fruits are eaten raw, cooked, or juiced even though the odor is like putrid cheese. Young leaves contain 4-6% protein and are cooked as vegetables or added to curries. The seeds can be eaten roasted. Most plant parts are claimed to have health-promoting benefits in a variety of preparations.

### References

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