## Ebenaceae

## LOCAL NAMES

English (Mauritius ebony, ebony persimmon, Ceylon ebony)

### **BOTANIC DESCRIPTION**

D. ebenum is a slow-growing medium-sized tree up to 30 m tall and up to 90 cm in diameter. Bole straight, with buttresses up to 2 m high; crown dense. Bark surface scaly, fissured, black to grey-black.

Leaves ovate-oblong to oblong-lanceolate, 5-13 cm x 2-6 cm, base cuneate to rounded, apex slightly acuminate to rounded, glabrous, tertiary venation reticulate, inconspicuous above, prominent below.

Flowers mostly male and bisexual; male flowers in 3-16-flowered cymes, 4-merous, stamens 16; female and bisexual flowers solitary, 3-4 merous, calyx lobes valvate, glabrous, corolla divided to about halfway, staminodes 8, ovary with a single 4-5-lobed style and 8 uni-ovulate locules.

Fruit depressed globose to subglobose, up to 1.5 cm across, glabrous.

D. ebenum has been known for its black wood since ancient times.

#### **BIOLOGY**

In Sri Lanka, ebony occasionally seeds twice per year.

## **ECOLOGY**

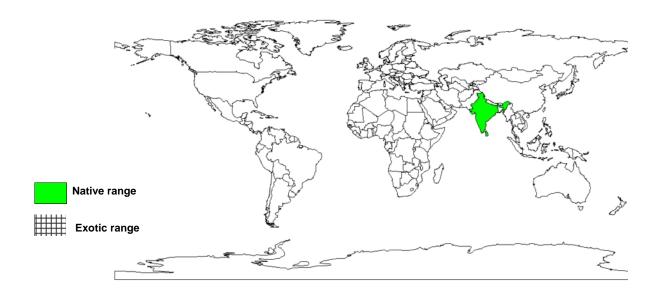
It occurs naturally in comparatively dry mixed evergreen forests usually as an understorey tree with other Diospyros species, Vitex altissima and Albizia odoratissima.

### **BIOPHYSICAL LIMITS**

Soils: D. ebenum prefers well drained soils with clay.

## DOCUMENTED SPECIES DISTRIBUTION

Native: India, Sri Lanka Exotic: Malaysia



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

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# **PRODUCTS**

Timber: D. ebenum is said to produce the best commercial black ebony. The sapwood is light yellowish grey, often streaked with black; heartwood very black, heavy with a specific gravity of 1.12. The wood is straight grained, fine and even-textured with a high glossy finish. The wood is difficult to season and work by hand. It is resistant to insect attack and fungi and very durable. It is mainly exported to China for furniture and to Europe as fancy wood. It finds use in sports goods, musical and mathematical instruments, ornamental carvings and turnery.

Poison: Fruits are used as fish poison.

Medicine: The gummy astringent fruits are used as a medicine and eaten in times of famine.

## **SERVICES**

Shade or shelter: The tree has been planted in India as a shade tree for cardamom.

# Diospyros ebenum

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TREE MANAGEMENT Ebony requires overhead light once seedlings establish.

GERMPLASM MANAGEMENT There are about 9000 seeds/kg.

PESTS AND DISEASES

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### **FURTHER READNG**

Abeyickrama BA, et al. 1991. Natural Resources of Sri Lanka. Conditions and Trends. A report prepared for the Natural Resources, Energy and Science Authority of Sri Lanka.

Brandis D. 1978. Indian trees: An account of trees, shrubs, woody climbers, bamboos and palms indigenous or commonly cultivated in the British India empire. London. 767pp.

CSIR. 1952. The Wealth of India: A dictionary of Indian raw materials and industrial products, Vol. III. CSIR.

Lanzara P. and Pizzetti M. 1977. Simon & Schuster's Guide to Trees. Fireside Books

Sankaram AVB, Natayana RVV. 1984. Structure of ebenone, a possible biogenetic precursor of elliptinone, from Diospyros ebenum. Phytochemistry 23(9): 2039-2042.

Santhakumaran LN, Srinivasan VV. 1993. Studies on the natural bioresistance of some Indian timbers in Goa waters. Proceedings of the National Academy of Sciences India Section B Biological Sciences 63(3): 337-340.

Sharma K & Gupta RK. 1986. Constituents of Diospyros ebenum stem bark. Fitoterapia. 56(6): 366-367.

Soerianegara I. et al. 1995. Diospyros L. In Lemmens, R.H.M.J., Soerianegara, I. & Wong, W.C. (Eds.): Plant Resources of South-East Asia No 5(2). Timber trees: Minor commercial timbers. Prosea Foundation, Bogor, Indonesia. pp 185-205.

## SUGGESTED CITATION

Orwa C, A Mutua, Kindt R, Jamnadass R, S Anthony. 2009 Agroforestree Database:a tree reference and selection guide version 4.0 (http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp)