Eucalyptus saligna Sm.

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MYRTACEAE (MYRTLE FAMILY)

No synonyms

Eucalyptus

Eucalyptus saligna is a fast-growing, straight-shafted tree that may reach 35 to 55 m in height and 120 to 150 cm d.b.h. The smooth bark has a light tone, frequently with a bluish shine, and it comes loose in long strips down to the base of the shaft. The young leaves measure 3 to 6 cm long and 2 to 3 cm wide and they have short, opposite petioles. The leaves of the older trees are narrow and lanceolate (10 to 20 cm long and 1.5 to 3 wide); they have a fine, uniform nervation, and are alternate. The species requires deep soils with good drainage and clayey, loose clayey, loose sandy or sandy textures; it endures slightly acid pH with a tendency toward neutrality. It grows well in flat to slightly rolling areas. Eucalyptus saligna develops best in loose, alluvial muddy-sandy soils, well drained, and of volcanic origin. In Colombia, it grows at elevations between sea level and 2100 m, with temperatures ranging from 2 to 35 °C and an annual average of 22 °C. Annual precipitation must be 800 to 4000 mm, with 4 to 5 months of hydric deficit. It demands light but resists drought periods. The species is moderately resistant to frost. It grows in formations of Tropical wet forest (bh-T), wet and very wet Tropical forest (bh/bmh-T), and Pre-Mountainous wet forest (bh-PM) (Lamprecht 1990, Pereíra 1989).

The wood of *E. saligna* is used in heavy and light construction and for furniture, boxes, and plank molding. It is primarily used for pulp, plywood, and agglomerate boards; in cabinetmaking and carpentry; and as crossbeams, long-lasting posts, and pilings. As round wood, it is used as transmission poles (with a duration of approximately 5 to 10 years), firewood, and charcoal.

Inflorescences develop with approximately 7 to 11 flowers in the axils of the leaves. The fruits are ovoid to cylindrical with an average size of 7 by 5 mm. A valve in the upper part of the fruit opens when the fruit ripens.

Because the trees are tall, manual gathering of seeds is difficult. Viable seeds average 275,150 per kg (Flora de Australia 1988, Lama 1986). Seeds can be stored up to 8 years if they are placed in hermetic containers and kept at 4 °C with a humidity content of 4.3 percent.

Germination in the laboratory occurs in 4 to 16 days. About 60,000 plantules are obtained from 1 kg of seed in nurseries (Trujillo 1983). The recommended substrate is two parts sand and one part soil, which must be disinfected before planting the seeds. Seeds must be sowed deep enough to prevent uncovering when watered, but they must not be too embedded. Plantules are lifted when they are 5 to 7 cm high.

This species can also be propagated by asexual means using spikes from superior trees, rooted in individual containers.

The soil at the planting site should be fertile and the underbrush should be controlled during the first stages of establishment. Very compacted soils or soils with drainage problems must be avoided. Planting densities range from 1,600 to 2,500 trees per ha (Lamprecht 1990, Pereíra 1989). The species is susceptible to attacks by ants and by the Diaphorte cubensis fungus (Pinzón 1997).

