

Decussocarpus rospigliosii (Pilg.) De Laub.

V.M. NIETO and J. RODRIGUEZ
Corporacion Nacional de Investigacion of Forestal
Santafé de Bogotá, Colombia

PODOCARPACEAE (PODOCARPUS FAMILY)

Nageia rospigliosii, *Podocarpus rospigliosii* Pilger, *Retrophyllum rospigliosii* (Pilg) C.N. Page

Pino, pino colombiano, pino de montaña, pino hayuelo, pino romerón

Decussocarpus rospigliosii grows naturally in the wet forests of the Andes. The life zones where the species predominates are: Pre-Mountainous wet forest (bh-PM), Pre-Mountainous very wet forest (bmh-PM), Low Mountainous wet forest (bh-MB), Low Mountainous very wet forest (bmh-MB), and Mountainous pluvial forest (bp-M).

Decussocarpus rospigliosii is a very slow-growing tree of 30 m in height and 40 cm d.b.h. The trunk has a scaly bark, and branching starts at 3 m. The crown has an oval shape and light green foliage. The leaves are 1 cm, opposite with a whole margin, flattened along the branches, with petioles almost nonexistent. The tree develops better on mildly inclined grounds, fertile river lowlands, plateaus, and small depressions. It grows in wet, clayey, or clayey-sandy, deep, relatively fertile soils with good to slow drainage and acid pH. It is a semi-heliophyte species that does not grow in marshy soils or in edaphic conditions of extreme drought (Corporacion de los Andes 1974). It grows best at elevations between 1500 and 3500 m, where average annual temperatures are between 10 and 18 °C and annual precipitation is between 1500 and 2500 mm. The tree needs constant humidity and cloudiness.

Because the wood of *D. rospigliosii* is easily worked, it is used for furniture, veneer, moldings, wood shaving boards, boxes, and general cabinetry. It is also used for light poles, paper pulp, and pencils.

The cream-colored flowers are 1 cm, and the green ovoid fruits are 3 cm with only one seed. Seeds are gathered only from the ground. During fructification the seeds are found in great quantities under the parent trees. Yellow seeds or seeds with a rotting or completely decomposed testa are more likely to germinate. Seeds are transported in sacks or large boxes. The seeds are carefully cleaned with cool water, and the last remains of the pulpy testa are completely

removed. Seeds average 250 to 400 per kg. Seeds are stored in sand under cold conditions.

Seeds may be planted directly from the threshing floor; however, soaking the seeds in room temperature water for 1 to 2 days is recommended. Percentage of purity is 99 percent. Germination percentage in a laboratory ranges between 50 and 60 percent. The germination period is 20 to 30 days.

The seeds can be planted any time of the year, although planting in the rainy season is recommended. Because they are large, the seeds can be planted directly in bags in small holes 2 cm deep and 20 by 20 cm apart. The seeds are attacked by a borer when they are on the ground or in the soil. The seed is covered with well-packed, fine soil, watered abundantly, and provided with shade for 6 months. Watering is repeated as needed, especially during the dry season. Every 4 to 6 weeks, the soil is pricked to maintain it in good physical condition and weeds are eliminated (Lamprecht and Liscano 1957). The lifting of plantules in nurseries must be done in two stages with an interval of 2 to 3 months. The plantules are transplanted into the field when they are 25 to 40 cm high.

The underbrush at the field site must be removed to reduce undesirable competition. However, a complete cleaning can cause excessive growth of the underbrush, which covers the soil like a carpet and can suffocate arboreal vegetation. In half shade, this condition is eliminated.

Planting distance depends on future use of the trees. For conservation of germplasm, a semiregular spacing of 1 by 1 m between plants will provide a rich reserve available for emergencies. To produce a forest, distances of 3 to 5 m may be used. Because the species develops slowly during the first months and the plants are small, herbaceous vegetation must be strictly controlled.