

Prunus annularis Koehne

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ROSACEAE (ROSE FAMILY)

No synonyms

Ciruelo, duraznillo, mariquita

One of the more than 100 species in the genus *Prunus* that grow throughout North, Central, and South America, *Prunus annularis* grows only in Costa Rica and in Chiriquí, Panamá (Standley 1950). In Costa Rica, it commonly grows at the base of the Poas and Barba volcanoes and the Talamanca range (Arnáez and others 1992).

Prunus annularis is an evergreen, medium-sized, slow-growing tree with a straight or irregular trunk. Cylindrical in form, the tree can reach 5 to 12 m in height and 20 to 50 cm d.b.h. Commonly found in clear spots in the forests, it requires deep, well-drained soils. *Prunus annularis* grows at elevations from 900 to 3200 m in rainy areas of the humid mountainous forests, and in very wet areas that receive 1000 to 3500 mm annual precipitation with temperatures of 4 to 27 °C.

Prunus annularis is a timber tree. Its grain is interwoven. The sapwood and heartwood of *P. annularis* differ slightly. The wood has a medium-to-thick texture and medium luster and is pink when dried. Easy to work, the wood is used for coal, floors, and girders and in construction. The trees are planted as windbreaks, live fences, and ornamentals (Arnáez and others 1992).

Prunus annularis flowers in November and December. The white flowers appear in racemes. Its fruits are drupes with a light-colored exocarp and a meaty mesocarp. The drupes, 1.5 cm long and 1.30 to 1.70 cm wide, turn red when they ripen February through April. Each drupe contains one seed, 1.06 cm long and 0.78 cm wide. The seed cover is wrinkled with

small longitudinal grooves. Birds may scatter the seeds or the seeds may fall. Natural regeneration was observed under the father tree; however, 2 months after germination many seeds die from fungus attack, such as talluelo disease. Seeds scattered by birds in separate areas and isolated spots survive (Arnáez and others 1992). *Prunus annularis* also resprouts in branches and cut trees.

Ripe fruits are collected by climbing the tree or by using an extension pruner. Collected fruits are separated from the branches and are transported in blanket sacks. The seeds are soaked in water for 24 hours to facilitate pulp removal. Seeds are dried in the sun. Seeds average 6,523 per kg. Seeds can be stored for a few months but less than 1 year (Arnáez and others 1992).

To ensure homogeneous germination, seeds should be soaked in water at 22 °C for 24 hours. Soaked seeds germinate in 22 days with 50 percent success. They germinate at room temperature (22 °C) in a previously sterilized substrate mixture of soil and sand (Arnáez and Moreira 1992, Arnáez and others 1992).

The seedlings are placed in the shade; in 21 days seedlings are transplanted to plastic bags and should remain in the shade. The species can also be reproduced using a bare-root or a transplant. Controlling weeds and watering will produce healthy and vigorous seedlings in 3 or 4 months. Plagues and diseases are not a risk to plantations although an ant of the genus *Atta* eats the leaves.

