Rubus rosifolius Sm. ROSACEAE

Synonyms: Rubus coronaries (Sims) Sweet



General Description.—Roseleaf raspberry, also known as wild raspberry, Mauritius raspberry, Queensland raspberry, fresa de montaña, framboisier, and akalakala, is an evergreen scrambling shrub, freestanding to 0.75 m, taller when supported on other vegetation, and extending laterally 2 m or more. Individual plants usually have several arching stems (canes) with basal diameters of 0.5 to 1 cm and have a 3-mm pith. Stems are green with reddish coloration at the nodes and lower portions. Wood of the lower stems is moderately hard and brittle. The stems, twigs, and leaf petioles and rachises are armed with short, straight or curved prickles. Adult plants have a fibrous lateral root system. Leaves are oddpennate with mostly seven ovate to linear, doubly serrate The leaflets. terminal or inflorescences contain one to four. 1.5 to 3 cm diameter flowers with five white petals. The globose to narrowly oblong aggregate fruit is bright red and juicy when ripe. The pitted (foveolate), yellow seeds (pyrenes) are about 1.5 mm long (author's observation, Howard 1988, Liogier 1985, Lu and Boufford 2002).

Range.—Roseleaf raspberry is apparently native from China and Taiwan south through Indochina and Indonesia along the eastern coast of Australia, Mauritius, New Caledonia, the Solomon Islands, and Vanuatu, and eastward as far as northeastern India. However, it is difficult to tell the native from naturalized range that extends from Japan to Africa and through the Caribbean (including Puerto Rico) and Brazil and to many of the islands

of the Pacific (including Hawaii) (Liogier 1985, Lu and Boufford 2002, Pacific Island Ecosystems at Risk 2002, Peixoto 2002).

Ecology.—Although roseleaf raspberry invades forest understories in some habitats (Pacific Island Ecosystems at Risk 2002), it is moderately shade intolerant, requiring partial sun to flower and fruit; it does best in full sun. Preferred habitats include natural and artificial openings in primary and secondary forest, such as tree-fall gaps, landslides, abandoned fields, neglected pastures, and roadsides. Roseleaf raspberry has a high moisture requirement, which usually means more than 1800 mm of mean annual precipitation and no severe annual droughts. The species usually grows at moderate to high elevations. It is reported at 2,200 m in Tahiti and 1,730 m in Hawaii (Pacific Island Ecosystems at Risk 2002). A variety of welldrained to poorly-drained soils are colonized.

Reproduction.—In China, roseleaf raspberry flowers in March through May and fruits in June and July (Lu and Boufford 2002). The species blooms and fruits throughout the year in continually moist areas of Puerto Rico and Equatorial Africa (Burkill 1997). Rubus species are pollinated by insects, particularly honey bees (Apis mellifera L.) (Dalaplane and Mayer 2000). Fresh fruits collected in Puerto Rico averaged 1.516 ± 0.102 g/fruit. Air-dried seeds separated from them averaged 0.00045 g/seed or 2.2 million seeds/kg. The seeds are dispersed by birds and rodents (Pacific Island Ecosystems at Risk 2002). Stems root (layer) whenever they come in contact with the soil, which helps it fill in newly colonized habitat.

Growth and Management.—Stems (canes) of roseleaf raspberry originating from sprouts grow 1 m or more per year and live about 1.5 years. New sprouts then arise to replace them and the plant lives on (potentially) for several years. In Puerto Rico, clumps and thickets of roseleaf raspberry usually disappear in 2 or 3 years due to mounting competition and encroaching shade from trees, shrubs, and herbs. The species is occasionally planted from wildlings and rooted layers for personal use in gardens. It is controlled along with

other vegetation by slashing or mowing, and by tillage to prepare ground for crops.

Benefits.—Roseleaf raspberry helps return disturbed areas to forest vegetation, protects the soil, and furnishes food and cover for wildlife. Leaves and tender shoot are browsed by livestock. The berries are eaten out of hand and made into drinks and preserves throughout its range. Fresh fruits are sold nearly year-round in Ugandan markets (Burkill 1997). The fruits contain relatively high (1.58 and 12.93 mg/100g fresh weight respectively) of vitamins E and C (Wei and Payne 2002). Roseleaf raspberry has been grown as a ground cover in Cameroon plantations (Burkill 1997). A double petaled variety (R. rosifolius var. coronaries (Sims) Focke) is grown as an ornamental (Garden Plant Conservation 2002). Infusions of flower petals are used to control diarrhea, vomiting, and other flu symptoms, and as a tonic (Liogier 1990). An infusion of the leaves was brewed in former times to relieve menstrual cramps, morning sickness, and labor pains (Nortan 2002).

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