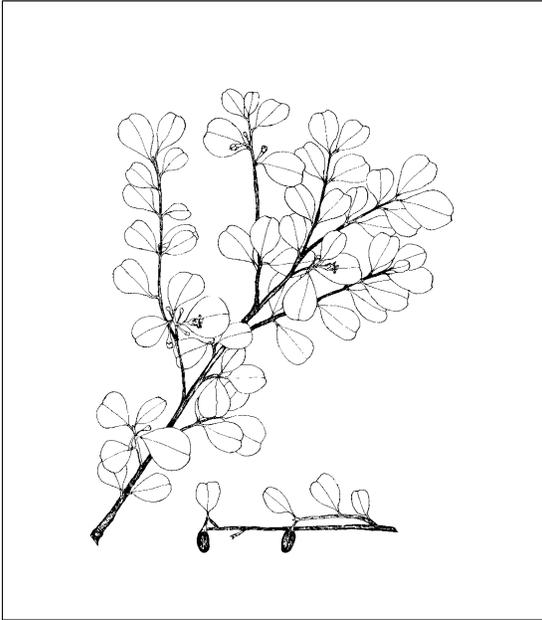


*Erythroxylum brevipes* DC.  
ERYTHROXYLACEAE

brisselet

Synonyms: *Erythroxylum brevipedatum* St. Lager  
*Erythroxylum rhamnoides* Peyr. ex Schulz



**General Description.**—Brisselet is a shrub, usually 1 or 3 m in height, that sometimes becomes a small tree to 8 m in height. It is also known by the common names, rat-wood, jibá, ratón, yaría de costa and rocío in Spanish and bois vinette and brésillette in French (Liogier 1988, Little and others 1974). Older plants often have multiple stems from below or just above the ground level. They are supported by a tap and lateral root system consisting of dark-brown, tough, and brittle roots. The shrub's crowns are cluttered with slender branches and twigs. The bark of brisselet is gray or light brown. Foliage on older branches is borne on short spurs. The 1- to 3-cm obovate leaves have prominent light-colored central nerves and are sometimes notched at the tips. The small, white, five-petaled flowers are clustered one to four at the leaf axils. Brisselet fruits are red, ellipsoidal, fleshy drupes 5 to 9 mm long (Howard 1988, Little 1988, Little and others 1974).

**Range.**—Brisselet is native to Hispaniola, Puerto Rico, the Virgin Islands, and St. Barts in the West Indies (Howard 1988). It has been much confused in the literature with *E. rotundifolium* Luman that

also occurs in Puerto Rico (Liogier and Martorell 2000), southern Mexico through Central America as far south as Costa Rica, and in the Bahamas, Cuba and Jamaica (Stevens and others 2001).

**Ecology.**—Brisselet grows in most types of soil, except poorly drained or salty soils. Plants are more frequent in eroded areas and rocky terrain where competition is weaker. Annual rainfall in the Puerto Rican range varies from about 750 to about 2000 mm. Elevation where it grows ranges from near sea level to about 760 m (Little and others 1974). Brisselet is moderately intolerant of shade. It invades abandoned pastures, fields, and disturbed areas, usually as scattered plants. It is common in early and mid-secondary forest and is an important plant of the understory of remnant and late secondary forests that are not too dense. Grazing cattle benefits the species, probably by reducing its competition. Cut stems will resprout. No observations are published on sprouting after single fires, but repeated fires will eliminate it from an area.

**Reproduction.**—Brisselet flowers during the summer months and fruits in late summer or early fall (Little and others 1974). Fruit production can be heavy in open-grown plants but is rare in shaded understory plants. A collection of fruits from Puerto Rico weighed an average of  $0.0936 \pm 0.0035$  g/fruit. Air-dried seeds separated from them weighed an average of  $0.0401 \pm 0.0007$  g/seed or 24,900 seeds/kg. Sown in commercial potting mix without any pretreatment, these seeds began germinating in 19 days and completed 99 percent germination in 47 days. Germination is epigenous. A thin, deep taproot is quickly produced. The seedlings are woody, stiff, and easy to lift and transplant. Birds disperse the seeds. Seedlings are relatively common and widespread.

**Growth and Management.**—Both height and diameter growth of brisselet is slow. Weaver (1990) measured the mean annual diameter growth of 33 brisselet stems 4 to 14 cm in diameter in St. John, U.S. Virgin Islands at 0.5 mm/year. Apparently, plants live for several decades. No

management experience has been published.

**Benefits.**—Brisselet is an important component of dry and moist forests, protects the soil, and furnishes cover for wildlife. Although seasonal, the fruits are a consistent source of food for birds. Bees are attracted to the fragrant flowers (Little and others 1974). The sapwood is light tan while the heartwood is dark brown, hard, and flexible. Because of its small diameters and lengths, the wood is useful for little other than fuel. Brisselet tissues do not contain cocaine, as obtained from its more famous relative *Erythroxylum coca* Lam.

## References

- Howard, R.A. 1988. Flora of the Lesser Antilles, Leeward and Windward Islands. Dicotyledoneae, Part 1. Vol. 4. Arnold Arboretum, Harvard University, Jamaica Plain, MA. 673 p.
- Liogier, H.A. 1988. Descriptive flora of Puerto Rico and adjacent islands, Spermatophyta. Vol. 2. Editorial de la Universidad de Puerto Rico, Río Piedras, PR. 481 p.
- Liogier, H.A. and L.F. Martorell. 2000. Flora of Puerto Rico and adjacent islands, a systematic synopsis. 2<sup>nd</sup> Ed. Editorial de la Universidad de Puerto Rico, Río Piedras, PR. 382 p.
- Little, E.L., Jr., R.O. Woodbury, and F.H. Wadsworth. 1974. Trees of Puerto Rico and the Virgin Islands. Vol. 2. Agriculture Handbook 449. U.S. Department of Agriculture, Washington, DC. 1,024 p.
- Stevens, W.D., C. Ulloa-U., A. Pool, and O.H. Montiel, eds. 2001. Flora de Nicaragua. Monographs of Systematic Botany Vol. 85, No. 1. Missouri Botanical Garden Press. p. 1-943.
- Weaver, P.L. 1990. Tree diameter growth rates in Cinnamon Bay Watershed, St. John, U.S. Virgin Islands. Caribbean Journal of Science 26(1-2): 1-6.

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