

***Tamonea boxiana* (Moldenke) Howard**
VERBENACEAE

crow broom

Synonyms: *Ghinia boxiana* Moldenke
Tomonea spicata sensu Urban
Ghinia spinosa sensu Britt. & Wils.



General Description.—Crow broom, also known as coast broom and cardero, is a branchy shrub 40 cm to 100 cm in height. The stems are slender and woody with many bifurcating branches. Crow broom plants are supported by robust taproots with laterals through their lengths. The short-petioled lower leaves are oblong, 0.8 to 1 cm long and may have three to five lobes; the upper leaves are linear and up to 2.5 cm long. Leaves and twigs are yellow-green. The plant is deciduous or semideciduous during the dry season. Tiny purple or whitish flowers are grouped in terminal racemes. The fruits are dry and shiny with four horns and contain a four-celled central cavity with

1-mm oblong seeds (Howard 1989, Liogier 1995).

Range.—Crow broom is native to Puerto Rico, the Virgin Islands, Barbuda, and Antigua (Howard 1989, Liogier 1995). It is not known to have been planted or naturalized elsewhere.

Ecology.—Crow broom grows in dry habitats that receive from about 700 to 900 mm of annual precipitation. It is normally found within a few km of the coast at elevations from near sea level to about 450 m. Soils are variable in texture, pH, and parent material, but are always well drained. Crow broom is intolerant of shade and heavy competition and apparently requires disturbance to become established. It is usually open-grown but also occurs in savannas. Crow broom is not eaten or is browsed little by cattle and appears to benefit from control of competition in overgrazed pastures. Vasquez and Kolterman (1998) list it as “occasional” in pasture and shrublands in Southeastern Puerto Rico. It is also found on roadsides, disturbed areas, and on rocky ridges and hill sides.

Reproduction.—Crow broom blooms during the dry season (March and April). It is insect pollinated. The fruits mature during the wet season and are released at the end of the wet season (December through February). The seed-like fruits are dispersed by sticking to animals or clothing, and after being released, germinate (presumably during the wet season) and grow. A collection of air-dried fruits from Puerto Rico weighed an average of 0.0108 ± 0.0003 g/seed or 93,000 fruits/kg.

Growth and Management.—Crow broom plants grow 20 to 30 cm/year and live about 4 or 5 years. No management experience has been reported. There appears to be no reason to encourage the species and possibly motivation in rangeland to control it. However, it is seldom common enough to warrant control measures.

Benefits and Detriments.—Crow broom

contributes to biodiversity in the habitat where it grows, helps protect the soil, and furnishes cover for wildlife. It may become a minor weed in rangelands and the clinging seeds can be a nuisance.

References

- Howard, R.A. 1989. Flora of the Lesser Antilles. Vol. 6. Arnold Arboretum, Harvard University, Jamaica Plain, MA. 658 p.
- Liogier, H.A. 1995. Descriptive flora of Puerto Rico and adjacent islands. Vol. 4. Editorial de la Universidad de Puerto Rico, Río Piedras, PR. 617 p.
- Vasquez, O.J. and D.A. Kolterman. 1998. Floristic composition and vegetation types of the Punta Guaniquilla Natural Reserve—Cabo Rojo, Puerto Rico. *Caribbean Journal of Science* 34(3-4): 265-279.

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