

***Solanum drymophilum* O.E. Schulz**
SOLANACEAE

erubia

Synonyms: none



General Description.—*Erubia* is a rare shrub that reaches 3 to 6 m and 7.5 cm or more in basal diameter. The plant may have a single stem or multiple branches from the base or near the base. It is supported primarily by semiflexible lateral roots. The foliage is concentrated near the ends of twigs. Alternate lanceolate to oblong leaves, 8 to 20 cm long and 2 to 4 cm wide, are long-pointed at the tip and obtuse or subcordate at the base with petioles up to 1 cm long. There are sharp, stiff, yellow spines up to 1 cm long on the mid-vein of the leaves and sometimes on the twigs and stems. Five-lobbed white flowers about 2 cm across with yellow anthers are grouped in lateral or subterminal racemes. The fruits are spherical, shiny black berries about 6 mm in diameter that contain many tiny seeds (Liogier 1995, Little and others 1974, U.S. Fish and Wildlife Service 2002).

Range.—*Erubia* is endemic to Puerto Rico. In 1974, it was known only from the upper Cordillera forest of the eastern and central mountains (Little and others 1974). Since then, the range has become constricted and fragmented until it is currently known from one natural site and one plantation (Miner Solá 1999) and has been declared an endangered species (U.S. Fish and Wildlife Service 2002). Deforestation and misguided weed control have contributed to the species' scarcity.

Ecology.—The environment of only the extant stands are known. *Erubia* may actually have a

much wider ecological amplitude. The existing natural stand is situated at 840 m on clayey soil derived from volcanic rock. The area receives about 1800 mm of mean annual rainfall. The plantation is located on clay soil over porous limestone in an area that receives about 2200 mm of mean annual precipitation. The plants in the plantation are healthy but do not appear to be reproducing on the site. The species appears to be intolerant of shade and requires disturbance to become established. Before colonization, it probably relied on landslides, tree tips, and other natural disturbances to become established. The known wild stand is confined to a brushy pasture.

Reproduction.—*Erubia* appears to flower and fruit throughout the year (U.S. Fish and Wildlife Service 2002). Flower and fruit production can be abundant. The flowers are insect pollinated. Twenty-eight fruits collected from a plantation in Río Abajo, Puerto Rico weighed (fresh) an average of 0.0504 ± 0.0050 g. The variability in weight is high (coefficient of variation = 52 percent). Air-dried seeds separated from them averaged 0.00092 g/seed or 1.1 million seeds/kg. Sown on moist potting mix without pretreatment, 89 percent of the seeds germinated between 12 and 50 days after sowing. Birds apparently disperse the seeds. Plants that are disturbed resprout.

Growth and Management.—*Erubia* has a moderate growth rate and probably lives at least 10 years. Nursery production appears to be easy, but field planting must be accompanied by at least 2 years of weed control.

Benefits.—*Erubia* helps reforest disturbed sites such as abandoned pastures and helps protect the soil. It contributes cover for wildlife, and presumably, the fruits are eaten by birds. As most other members of the Solanaceae family, its tissues probably contain physiologically active chemicals that might be useful in herbal medicine and control of pathogens.

References

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