

***Koanophyllon polyodon* (Urban) King & H.E. Robins.**
ASTERACEAE

polyodon

Synonyms: *Eupatorium polyodon* Urban



General Description.—The name polyodon is assigned according to the convention that if no common name exists, the species (or sometimes the genus) Latin name is used as a common name. Polyodon is a somewhat spindly, upright or arching shrub usually 1.5 to 3 m (occasionally to 6 m) in height and 2 to 3 cm (sometimes 5 cm) in basal diameter. The shrub may have a single or multiple stems, straight lower sections 0.5 to 1 m long, then curving and branchy with fine twigs above. The plant is supported by an extensive lateral and fine root system. The opposite leaves are papery and rough with short petioles and three main veins arising from or near the base. The leaf blades are ovate with a heart-shaped or nearly heart-shaped base, pointed tip, and serrate edges. The inflorescences are terminal corymbs of white or rose compound flowers (heads). Each develops several, five-ribbed, 3-mm achenes tipped with numerous, 3 to 4 mm hairs (pappus) (author's observation, Liogier 1997).

Range.—Polyodon is endemic to Puerto Rico (Liogier 1997) and is not known to have been planted or naturalized elsewhere.

Ecology.—Polyodon grows on moderately and well-drained but rarely excessively drained soils of loamy and clayey textures with pH's ranging from about 5 to 7. Both sedimentary (including

limestone), igneous, and metamorphic (including ultramafic) parent materials are colonized. The species is found in areas that receive from about 1000 to 2500 mm of mean annual precipitation at elevations ranging from near sea level to 900 m. Polyodon grows as scattered individuals, diffuse stands (under forest canopies), or in thickets. The species has an intermediate tolerance for shade and is able to grow and reproduce under shade if not too dense. It depends on taller vegetation for support in order to reach heights of more than about 1.5 m. The species is occasional to common in open forest, brushlands, abandoned pastures, and old road cuts and banks.

Reproduction.—Polyodon flowers near the end of the wet season (November-January) and fruits during the dry season (March-May). It is insect pollinated. A collection of seeds averaged 0.00019 g/seed or 5.2 million seeds/kg. Placed on moist filter paper without any pretreatment, 67 percent germinated between 12 and 68 days after sowing. Germination is epigeal. The fruits are dispersed by the wind. Seeds are produced in abundance, but seedlings are scattered. Plants will resprout when damaged.

Growth and Management.—Individual stems may live for 6 years or more. Plants can survive longer by producing sprouts. Sprouts grow at least 1 m in their first year. No management experience has been published. However, maintaining areas in early and middle secondary forest would probably encourage populations of polyodon.

Benefits.—Polyodon contributes to biodiversity in its wildland habitat, helps protect the soil from erosion, and furnishes wildlife cover. It is browsed to some extent by cattle and goats.

References

- Liogier, H.A. 1997. Descriptive flora of Puerto Rico and adjacent islands. Vol. 5. Editorial de la Universidad de Puerto Rico, San Juan, PR. 436 p.

John K. Francis, Research Forester, U.S.
Department of Agriculture, Forest Service,
International Institute of Tropical Forestry, Jardín
Botánico Sur, 1201 Calle Ceiba, San Juan PR
00926-1119, in cooperation with the University of
Puerto Rico, Río Piedras, PR 00936-4984