***Vernonia proctori* Urbatsch** Proctor's vernonia
ASTERACEAE

Synonyms: none

General Description.—Proctor's vernonia (a name assigned by the author) is an upright gray-green shrub to 1.5 m in height and 1 cm in basal stem diameter. Older plants may have as many as 50 stems arising from the root crown. The plants have many lateral and abundant fine roots. Branches are greenish gray, turning brown or gray with age. The foliage is crowded on new twig growth. Alternate leaves have short petioles and blades that are broadly elliptic to suborbicular, 1.2 to 3.5 cm long, and rounded at the tip. They are dark green above and white beneath and have a densely ciliate margin. The inflorescences are terminal, sessile clusters of usually three heads with 16 to 22 florets. The corollas are purple or blue. At maturity, the heads contain 2- to 3-mm long achenes with a white pappus (Liogier 1997, Miner-Solá 1999, U.S. Fish and Wildlife Service 2002).

Range.—Proctor's vernonia is endemic to Puerto Rico and found only at the summit of Cerro Mariquita in the range of hills known as Sierra Bermeja in southwestern Puerto Rico. The species is endangered and has an estimated population of 950 individuals in an area of a few hectares (U.S. Fish and Wildlife Service 2002).

Ecology.—Proctor's vernonia grows in exposed rock crevices and in shallow cherty clay loam soil up to 30 cm deep that has developed over weathered siliceous rock. Mean annual precipitation is about 900 mm/year with a fall wet season and spring dry season. Humidity is high and breezes are almost continuous. Elevations where the population grows ranges from 270 to 300 m above sea level (U.S. Fish and Wildlife Service 2002). Proctor's vernonia is intolerant of shade. It grows in the open or in broken stands of low trees, but not under closed-canopy forest. Bare ground and 3 to 4 weeks of almost daily precipitation is probably necessary for establishment. The endemic area was once severely grazed and cut over for fuelwood, but has been much less disturbed in recent years.

Reproduction.—Proctor's vernonia flowers and fruits during April and May (U.S. Fish and Wildlife Service 2002). The plant produces seed in abundance. A small quantity of seeds collected by the author averaged 0.00038 g/seed or about 2.6 million seeds/kg. Placed on moist filter paper, 13 percent germinated within 15 days. The seeds are dispersed by the wind. Seedlings are infrequent.

Growth and Management.—Proctor's vernonia appears to grow slowly as a seedling and take many years to attain large plant size. Individual stems arising from sprouts grow about 20 cm/year. Although individual stems last only a few years, the plant, renewing itself with new sprouts, appears to live for many years. Propagation techniques have not been published. Complete protection of the Cerro Mariquita site from development, grazing, and fire is critical.

Benefits.—Proctor's vernonia is a pretty plant and certainly contributes to the aesthetics of the area where it grows. It protects the soil and furnishes cover for wildlife.

References

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Miner-Solá, E. 1999. Arboles y plantas en peligro de extinción en Puerto Rico. Puerto Rico Ecológico Vol. 3. First Book Publishing of Puerto Rico, San Juan, PR. 91 p.

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