

***Nea buxifolia* (Hook. f.) Heimerl**  
NYCTAGINACEAE

nia

Synonyms: *Eggersia buxifolia* Hook. f.



**General Description.**—*Nia*, also known as saltwood, is a fine-leaved, upright, evergreen shrub from 2 to 7 m in height and 2 to 8 cm in basal stem diameter. There is usually a single stem emerging from the ground with multiple branches low on the stem. *Nia* plants have a weak taproot with lateral and fine roots, all brownish orange in color. The few slender branches form a diffuse crown. Bark is smooth and gray. The inner bark is bitter. The wood is whitish, soft, and does not have discernable annual rings. Oblong to oblanceolate, entire leaves are opposite or in whorl-like groups along the twigs. The 9- to 24-mm long and 3- to 9-mm broad blades are supported by 1- or 2-mm petioles. Small light yellow flowers are borne on separate plants (dioecious). The elliptic, red, slightly fleshy fruits are 4 to 5 mm long and contain one seed each (Liogier 1985, Little and others 1974).

**Range.**—*Nia* is native to Puerto Rico, its offshore island of Culebra, St. Thomas and St. John of the U.S. Virgin Islands, and Virgin Gorda of the British Virgin Islands (Clubbe 2000, Liogier 1985, Little and others 1974). It has been widely used as a bonsai plant and planted somewhat as an ornamental but is not known to have naturalized anywhere.

**Ecology.**—*Nia* has an intermediate tolerance for

shade. It usually grows in the understory of low to medium-density remnant and late secondary forests. The species sometimes grows in semi-exposed positions with other shrubs and low trees on the tops of ridges. These are moist and dry forests over sedimentary (especially limestone), igneous, and metamorphic rocks. It is rare to infrequent in most habitats except the moist limestone hills in northern Puerto Rico where it is locally common. *Nia* is sometimes found in coastal thickets. A wide variety of well-drained soils are colonized. Mean annual precipitation ranges from 750 to about 2200 mm at elevations from a little above sea level to 500 m. The minimum temperature for potted plants is reported to be 4.5 °C (Zane 2002).

**Reproduction.**—*Nia* flowers in the spring and early summer and matures fruits in mid- to late summer. The fruits, which are produced in sparing quantities, ripen a few at a time over a period of a few weeks. A group of fruits collected in Puerto Rico averaged  $0.0291 \pm 0.0011$  g/fruit. However, the seeds from this collection that averaged  $0.0021 \pm 0.0001$  g/seed (air dried) failed to germinate. Seeds of this species are probably dispersed by birds. Natural seedlings are rare to scattered. According to Zane (2002), *nia* can be propagated by seed, branch cuttings taken in March through June, and by air layering.

**Growth and Management.**—*Nia* is relatively slow growing. Open-grown ornamentals reached 2 m in height in about 8 years. Understory saplings add just a few centimeters of height per year. Life span in forests may reach several decades. Although methods of propagation and culture in pots as bonsais is well understood, no wildland plantings have been documented. Probably the best management is protection of the stands where the species occurs.

**Benefits.**—*Nia* contributes to the diversity and aesthetics of the forests where it occurs, helps protect the soil, and furnishes food and cover for wildlife. It is one of the best broadleaf tropical (room temperature) bonsai species available and offers promise as an ornamental, especially for hedges and other shaped ornamentals.

## References

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