

GROUNDSEL TREE

Baccharis halimifolia L.

Plant Symbol = BAHA

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Alternate common names

Eastern baccharis, silverling, sea myrtle, manglier, consumption weed, saltbush

Uses

The native groundsel tree is recommended as a garden shrub or hedge in Florida because of its hardiness, freedom from disease, fall flowering, and resistance to salt spray. The female plants, in particular, with their densely silver-green aspect, are beautiful when few other plants are flowering. Plants can be trained to a single trunk – tree-like and up to 10 feet tall. It is a useful shrub for reclaiming moist

or wet sites, including retention areas and drainage ponds.

Although it apparently has little or no value as a good food source for game animals (“wildlife”), groundsel tree provides cover and nesting habitat for various species of birds. Bees and small butterflies use the abundant nectar from the male flowers, which in turn attract songbirds to forage on the insects.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant’s current status, such as, state noxious status and wetland indicator values.

Description

General: Sunflower Family (Asteraceae). Deciduous shrubs 1-2(-6) m tall, sometimes single-stemmed from the base and tree-like. Leaves: deciduous, obovate to elliptic or narrowly elliptic-oblongate, 3-nerved, 2-6 cm long, smooth-margined or with 1 tooth or 1-3 pairs of coarse teeth on the upper margins, the surfaces slightly resinous, usually with small dots. Florets closely clustered in heads surrounded by involucre bracts, the heads borne in tight aggregations; heads of two sexes, each produced on a separate plant (the species dioecious) — the staminate heads (pollen-producing, with sterile ovaries) with only tubular, 5-lobed corollas; the pistillate heads (with fertile ovaries) with only thread-like corollas. Fruits (“cypselae” or achenes) are 1-seeded, nearly cylindrical, 1.3-1.8 mm long, topped by a ring of numerous, slender, flexible, silvery-white bristles (the “pappus”), which elongates at achene maturity to 10-12 mm long, much longer than the involucre. The small fruits are shed with the pappus, a wind-catcher that enables fruit dispersal over a wide area. In a steady wind of about 17 km/hour, drift of seeds from a shrub two meters in height has been recorded up to 140 meters. The common name “silverling” alludes to the silvery aspect of pistillate plants in the fall, when the pappus of each maturing fruit elongates and protrudes from the head.

Variation within the species: Plants of this species from the West Indies have been called *Baccharis halimifolia* var. *angustior* DC., but there appears to be little justification for their formal recognition. *Baccharis halimifolia* closely resembles the Mexican species *Baccharis heterophylla* Kunth. Where both occur in Veracruz, Mexico, *B. halimifolia* can be

recognized by its habitats along the coast or coastal plain, its more gradate, blunt-tipped involucre bracts, and its longer pappus. Plants from central Nuevo León, Mexico, have narrower leaves than typical for *B. halimifolia*, but in most respects they are more similar to it than to *B. heterophylla*. *Baccharis halimifolia* hybridizes with *B. neglecta* Britt. where the two meet in east Texas.

Groundsel tree is a member of the sunflower family, but the sunflower-like nature of the heads is not evident without close inspection. *Baccharis halimifolia* is the species upon which the concept of the genus *Baccharis* is based (the type species).

Distribution

For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site. Groundsel tree occurs in all states bordering the Atlantic Ocean and Gulf of Mexico, plus the Caribbean and into northeastern Mexico as far south as Veracruz and San Luis Potosí.

Establishment

Adaptation: Groundsel tree grows on beaches, marshes and hammocks near the shore, and various more inland sites, including ditches, old fields, and roadsides. Flowering in the United States occurs mainly in August-December.

General: Plants of groundsel tree as young as 3 years may produce viable seed. Because it is dioecious, male and female plants are necessary for seed production. There is no dormancy requirement for germination. Other reasons for its colonizing success are prolific seed production and high seed germination percentage, long-range seed dispersal, shade tolerant seed production, wide adaptability to soil nutrients and salinity, survival in extreme wet soil conditions, and ability to resprout after fire.

Groundsel tree can be cultivated in a sunny location. It does not tolerate heavy clay soils but can be successfully grown in nutrient-poor soil. Most native coastal plain habitats are sandy. In its resistance to salt spray, it is useful in coastal situations. It is a fast-growing plant and will quickly regrow, even if cut back to the base.

Management

Probably from initial introductions of groundsel tree as an ornamental into western Europe (France, Spain, and Italy) and Queensland, Australia, it has become an invasive weed, rapidly occupying open sites and encroaching into grassland and parkland. Because animals apparently find it unpalatable (the leaves and flowers contain a cardioactive glycoside), it is

common to see the species growing in abundance in pastureland. Groundsel tree is toxic to livestock, causing staggering, trembling, convulsions, diarrhea, and other gastrointestinal symptoms, but this feature is less significant than the displacement of other vegetation through its rapid colonization. This native species has been regarded as an "infestation" on overgrazed rangeland in the southern United States.

Various native species of beetles and moths are known to feed on leaves and buds of *Baccharis*. Larvae and adults of several of these are capable of defoliating plants of groundsel tree. North American gall-forming midges, seed-feeding bugs, and stem borers also cause damage and some have been introduced into Australia as agents of biological control for *Baccharis halimifolia*.

Cultivars, Improved and Selected Materials (and area of origin)

These plant materials are somewhat available from commercial sources. Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government". The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

References

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Nesom, G.L. 1990. *Infrageneric taxonomy of North and Central American Baccharis* (Asteraceae: Astereae). *Phytologia* 69:40-46.

Zanowiak, D.J. 1991. *An analysis of systematic and phyletic relationships within the Baccharidinae* (Asteraceae: Astereae). Ph.D. Dissertation, Texas A&M University, College Station, Texas.

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