

# Propagation and Production of Seacoast Marshelder<sup>1</sup>

Mack Thetford and Debbie Miller<sup>2</sup>

Seacoast marshelder (*Iva imbricata* Walter [Asteraceae]), occurs on coastal dunes throughout the south Atlantic and Gulf region (coastal Virginia to coastal Texas) and is used for dune restoration and stabilization projects (Figure 1). The plant has sparse, woody, upright stems reaching heights of 0.3 to 1.2 m (0.98 to 3.94 ft). Leaves are fleshy, narrow and lance-shaped and arrangement may be alternate or opposite. Flowers are not very showy, occur on terminal racemes with a bract below each flower, and have small lavender petals. The flowers appear in late summer and continue into early fall. The plant is prized for its ability to accumulate sand, thereby producing low, rounded dunes (Craig 1991).



Figure 1. Seacoast marshelder (*Iva imbricata*) spring foliage detail and entire plant growing in a fore-dune position.

Credits: Mack Thetford, UF/IFAS

Softwood cuttings may be prepared from the uppermost 4 inches of non-branched terminal shoots. Shoots below the 4-inch terminals typically contain many short branches. These short shoots, each containing an intact terminal bud, may also be used to prepare additional cuttings as short as 2 inches. Terminal and lateral cuttings should be segregated and lateral cuttings should be further graded based on

cutting length. Auxin application is not needed to achieve 80% rooting of 2- to 4-inch cuttings. However, liquid auxin treatment containing IBA (indole\_3\_butyric acid) at 1000 ppm has been shown to increase rooting percentage for 2-inch lateral cuttings (Thetford and Miller 2002). Increasing the IBA concentration to 5000 ppm does not further improve rooting or root quality above that achieved without auxin application. Cuttings of 4 inches and smaller may be used for propagation, but propagators should segregate cuttings based on size because differences in shoot height will remain between cutting sizes. Additionally, plants from 4-inch cuttings often produce a greater number of lateral branches than plants from smaller cuttings. Given the obvious difference in transplant branching and size, cuttings should be graded based on initial size before rooting. Shorter cuttings do produce acceptable transplants and should be used when cutting material is limited.

The production schedule for this species in spring and summer months will begin with cuttings stuck in a pinebark-based substrate such as 100% milled pine bark or a commercial planting mix. Many commercial growers will use 72-cell trays with roots initiating within 2 to 3 weeks. Rooted cuttings are removed from the mist on week 3 or 4 and the plants remain in the propagation flats through weeks 5 to 6. Plants are irrigated as needed 2 to 3 times each week. Nutritional status of the plants is maintained by liquid fertilization (1 to 2 times each week) with a 150 ppm N solution from products such as Peters 20 N:10 P<sub>2</sub>O<sub>5</sub>:20 K<sub>2</sub>O (JR Peters, Inc, Allentown, PA 18106). Seacoast marshelder may be pruned in weeks 4 or 5 before transplant or within

1. This document is ENH975, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date August 2004. Reviewed February 2019. Visit the EDIS website at <https://edis.ifas.ufl.edu> for the currently supported version of this publication.

2. Mack Thetford, associate professor; Environmental Horticulture Department; and Debbie Miller, professor, Wildlife Ecology and Conservation Department, West Florida Research and Education Center; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.

1 week after transplant to initiate branching. Following transplant into 4-inch or 1-quart pots, plants require an additional 4- to 6-week production period to achieve a full rootball and a canopy of approximately 6 to 8 inches.

## References

Craig, RM. 1991. "Plants for Coastal Dunes of the Gulf and South Atlantic Coasts and Puerto Rico." United States Department of Agriculture Soil Conservation Service Agriculture Information Bulletin 460. 41 pages.

Thetford, Mack and Debbie Miller. 2002. "Propagation of 4 Florida Coastal Dune Species." Native Plants Journal. Vol.3(2):112-120.