Ipomoea imperati

Beach morning glory
Convolvulaceae

Seed Propagation: Plants are easily propagated by seed. Collect fruits (capsules) when they turn tan and begin to dry out; avoid collecting fruit when green in order to ensure seed maturity. Seeds split upon and seeds fall out at maturity and can easily be spotted on the ground in coastal areas as they are relatively large (few mm wide). Germination for beach morning-glory requires scarification because seeds are physically dormant (Martínez et al. 1992). Seeds germinate with both constant (90% at 35° C) and fluctuating day/night temperatures (60 to 85% at 40/20° C) in dark or light. Seeds retain germinability when buried up to 0.75 in and inundated with 25% seawater.

Cutting Propagation: Plants are easily propagated from stem cuttings. Single- or multiple-node stem cuttings can be taken along any portion of the stem. Place at least one node into the rooting substrate and place under intermittent mist with natural photoperiod until roots form. Cuttings root within 7 to 10 days and should be removed from mist at the first sign of rooting, or they will quickly deteriorate. Cuttings using stolon tissue is also possible. Stem cuttings taken on 3/7/2022 from all portions of the stem from wild coastal populations had several few mm long roots by 4/22/2020. Cuttings were placed in 72-cell liners with peat-based potting mix (MetroMix 830, Sungro) under intermittent mist in a climate-controlled greenhouse.

Production: Plants are easily produced using standard greenhouse and nursery procedures. Plants can be produced in a variety of substrates but performed better in a 45% compost (1:1 mix biosolids to yard waste) and 55% aged pine bark with fines mix compared to a 75% aged pine bark with fines and 25% MetroMix 830 (SunGro Horticulture, Agawam, MA) mix or a 75% aged pine bark with fines and 25 % Sunshine Mix PF (SunGro Horticulture) mix. However, for all 3 substrates plants produced sellable plants in 4-inch containers after 50 days. Plants were fertilized with ¼ tsp of slow-release fertilizer (15-9-12 Osmocote Plus) within a climate-controlled greenhouse from 72-cell plugs after 50 days within a climate-controlled greenhouse. Plants grown outdoors should be covered during periods of freezing to protect foliage though uncovered plants may grow back from portions of the plant below the potting mix line. Plants may need to be pruned with excessive stolon growth which root into other containers and make moving and separating pots difficult. Plants are magnets for mealy bugs, white flies, and aphids.

Comments: Plants were easily installed into a landscape setting within a relic sandhill soil using transplanted stolons in the spring or using containerized plant material throughout the year. Plants were successfully installed in primary dunes and on constructed berms in coastal upland areas. Plants installed on 11/21/2019 using 4-inch containers had 92% survival for toe of back side of berm, 64% survival for backdune and backslope of primary dune, and 0% survival for beach side of berm by 8/21/2020. Installed plants were derived from stem cuttings and grown in a 75% aged pine bark with fines and 25% MetroMix 830 (SunGro Horticulture, Agawam, MA) mix. Plants have an aggressive growth habit and may be used as a turf replacement. There are at least a dozen Ipomoea species native to Florida. I. imperati is similar in growth habit to I. pes-caprae and both are found in coastal beaches and dunes. I. imperati has white rather than purple flowers and lobed rather than reflected/notched leaves when compared to I. pes-caprae.