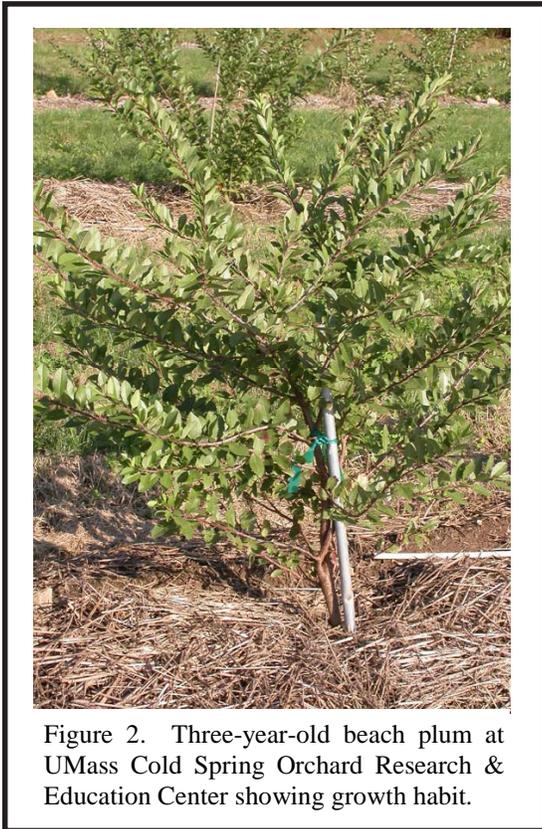
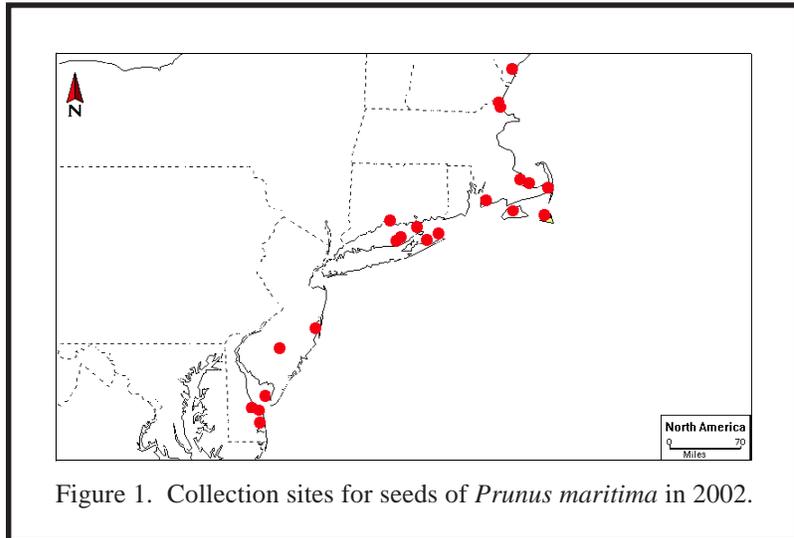


Beach Plum Seedling Evaluation Trial

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Beach plum, *Prunus maritima*, is a fruiting shrub native to coastal dunes of the Northeastern United States. The fruit has been collected from the wild for making preserves and jelly since colonial times. Commercial production of preserves and jelly remains dependent on wild plantings, but supplies are unreliable. This has generated interest in commercial production, which has prompted small-scale production trials to evaluate germplasm and to define horticultural practices for commercial production. UMass Extension in Barnstable County and Cornell University teamed up to secure funding



to support these objectives. Seeds were collected from wild stands along the east coast (Figure 1, Table 1).

The UMass Cold Spring Orchard Research & Education Center was provided with approximately 150 seedling plants (five each from 25 genotypes from 14 collection sites plus smaller numbers of additional genotypes) from the seeds collected at the above sites in 2003 (Table 1). The objective was to plant these seedlings and to determine if and how well *Prunus maritima* may grow and fruit in non-traditional sites. Results from earlier trials in this project have indicated that increased fruitfulness can be obtained with fertilization and irrigation, something not found in native sites.

In May 2003, seedlings were planted in a randomized block at a 4-foot in-row and 15-foot between row spacing. Whips were protected with grow tubes for the first 3 months to protect them from herbicide applications and deer browsing. Fertilizer and pesticide applications were made according to normal practices for plums already growing at the UMass Cold Spring Orchard. No fruit set in the summer of 2004 and low set occurred in 2005. Figure 2 shows the growth habit of a 3-year-old plant growing in this trial.

Growth and flowering were assessed in 2005 and will be reported when data have been compiled and analyzed. It is hoped that any harvested fruit will be either sold at the UMass

Table 1. Beach plum seed collection sites.

Site	City	State	Latitude	Longitude
marsh path	Ogunquit	ME	43°15'57.5"	70°35'23.1"
Plum Island ^z	Newburyport	MA	42°46'24.0"	70°48'23.4"
Crane Beach ^z	Ipswich	MA	42°41'	70°46'
East Sandwich Beach ^z	East Sandwich	MA	41°45'13.3"	70°26'52.5"
Sandy Neck Beach ^z	Barnstable	MA	41°43'57.6"	70°21'33.3"
Gillis property ^z	Chatham	MA	41°40'	69°55'
Westport Point ^z	Westport	MA	41°30'39.2"	71°04'45.0"
North Neck	Martha's Vineyard	MA	41°23'	70°30'
Chaffinch Island	Guilford	CT	41°18'	71°41'
York and Madaket	Nantucket	MA	41°17'	70°
Orient Beach State Park	Orient Point	NY	41°07'47.0"	72°15'55.7"
Montauk Point State Park ^z	Montauk	NY	41°04'33.7"	71°51'57.5"
Goldsmith Inlet	Southold	NY	41°03'25.4"	72°28'13.8"
Mattituck Inlet ^z	Mattituck	NY	41°00'48.2"	72°33'33.6"
Hither Hills State Park ^z	Montauk	NY	41°00'	72°02'
Island Beach State Park ^z	Seaside Park	NJ	39°51'	74°05'
Wharton State Forest ^z	Atsion	NJ	39°44'21.3"	74°43'32.2"
Higbee Beach ^z	Cape May	NJ	38°57'43.1"	74°57'46.9"
Beach Plum Island ^z	Broadkill Beach	DE	38°48'12.3"	75°11'11.5"
Cape Henlopen State Park	Lewes	DE	38°47'	75°05'
Delaware Seashore S. Park	Dewey Beach	DE	38°36'15.9"	75°03'43.0"

^zSources used in the UMass Cold Spring Orchard planting.

Cold Spring Orchard Store fresh or preserved and sold as jelly. Customer acceptance will be determined utilizing sales and surveys.

Acknowledgement

Plant material was provided by Northeast SARE.

