

SUMMARY OF VITEX RESEARCH

March, 2006

- Baruch Institute of Coastal Ecology and Forest Science, Clemson University
 - 1) Field, greenhouse, and laboratory studies of Vitex biology including species composition of Vitex covered dunes, seed production, seedling density and survival, shading, root biomass, soil hydrophobic properties, and testing for allelopathic interactions.
 - 2) Field measurements of the sand trapping and sand holding ability of Vitex compared to native dune vegetation and dune erosion measurements of Vitex covered dunes and control dunes.
 - 3) Field measurements of a pilot herbicide trial on Debordieu and the establishment of replicated Vitex replacement trials testing three methods to eradicate Vitex prior to planting sea oats.
 - 4) Observations of piles of cut Vitex stems to determine the potential for rooting and research on the efficacy of the Georgetown County Landfill composting system to dispose of Vitex cuttings.
 - 5) Development and demonstration of a technique and follow-up for large scale Beach Vitex eradication in Horry, Georgetown and Charleston counties.
- Department of Horticulture, Clemson University
 - 1) Field Vitex eradication trials at Litchfield Beach and Pawleys Island.
 - 2) Greenhouse herbicide efficacy experiments and seed stratification research.
 - 3) Field herbicide efficacy experiments and methods to treat cut stems.
 - 4) Laboratory characterization of compounds associated with soil hydrophobic reactions and testing Vitex seed, leaves, and litter for these compounds.
- Biology Department, College of Charleston
 - 1) Determination of the mating system of Vitex and the potential for inbreeding depression.
 - 2) Demographic modeling of older Vitex sites in NC in comparison to younger SC sites.
 - 3) Determination of the genetic diversity of NC and SC Vitex populations.