

# Vegetative Releases for Beach, Marsh and Estuary Restoration in South Louisiana

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## 'Vermilion' smooth cordgrass

- Used primarily for erosion control along shorelines, canal banks, levees, and other areas of soil-water interface
- An effective soil stabilizer used on interior tidal mudflats, dredge-fill sites, and other areas of loose and unconsolidated soils associated with marsh restoration.
- Provides an effective buffer that dissipates energy, reduces shoreline scouring, and traps suspended sediments and other solids.

## Pelican Germplasm black mangrove

- Provides valuable habitat for brown pelicans and other shorebirds
- Important to coastal ecosystems by stabilizing soils with their extensive root systems
- Contributing biomass to the detritus cycle
- Can persist in strongly saline habitats



## Fourchon Germplasm bitter panicum

- Above ground portion of the plant reduces wind velocity causing sand to drop out of the wind stream and accumulate.
- Shows greatest plant vigor where blowing sand accumulates around the plant
- Resilient to salt spray, occasional inundation, high temperatures, low soil moisture, low fertility, sand abrasion and smothering by drifting sands

## Caminada Germplasm sea oats

- Exceptionally tolerant of harsh conditions associated with coastal beach environments
- Tolerates salt spray, short inundation of saltwater from storm surges, strong winds, xeric soil conditions, and rapid sand accretion
- Superb dune and sand builder



The mission of the USDA - Natural Resources Conservation Service (NRCS) Plant Materials Program is to develop, test and transfer plant science technology to meet customer and natural resource needs. Specifically, the Golden Meadow Plant Materials Center (PMC) near Galliano, Louisiana consists of a state-of-the-art facility with the necessary resources to identify, develop and transfer coastal wetland and plant technologies. In addition to wetland plants, the center also focuses on native vegetation as a remedial source to combat natural resource concerns including issues affecting soil, water, air, plant, animal, human and energy. The PMC currently operates on approximately 90 acres and is dedicated to address primarily both plant research and increase. Four primary objectives of the PMC include: 1. The development of improved plants that will persist in a dynamic coastal marsh environment; 2. The development and transfer of effective plant science technologies that address critical wetland conservation needs; 3. To release and provide foundation plant materials for the commercial increase of improved conservation plants; and 4. To promote the use of tested and proven plant materials to solve specific coastal conservation problems. Thus far, this PMC has eight plant varietal releases meeting all of the above objectives for the Northern Gulf Coast area. The releases are highly effective and aid in the remediation processes of beach, marsh and estuary restoration. Each plant release is unique and has a way of reducing coastal erosion, stabilizing channel and eroded shorelines, dune reclamation and stabilization, creation of marsh and providing food, cover and habitat to wildlife. Plants released by the PMC are made available to commercial growers that supply wetland plant material for coastal restoration activities.



## Brazoria Germplasm seashore paspalum

- Effective pioneering species used on shorelines, dunes, canal banks, mudflats, dredge materials, and other bare and transient soil deposits
- Spreads rapidly and can form dense stands within two growing seasons from planting
- Adapted to low-elevations at or slightly above normal water levels

## Timbalier Germplasm gulf bluestem

- Intended for use on coastal beaches and barrier islands of the north central Gulf of Mexico basin
- Excellent planting component to increase species diversity and back dune stabilization



## 'Gulf Coast' marshhay cordgrass

- Recommended for conservation planting in coastal areas of the north central Gulf of Mexico basin
- Effective for marsh restoration, shoreline and levee stabilization, and coastal beach and barrier island sand dune enhancement and stabilization

## Bayou Lafourche Germplasm California bulrush

- Recommended for erosion control along shorelines, canal banks, levee banks, and other areas of soil-water interface
- Used in the creation and restoration of wetlands, to improve water quality, and reduce suspended sediments
- Provides habitat for mammals, birds and fish and promotes establishment zones for submerged aquatic plants



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