United States Department of Agriculture
Natural Resources Conservation Service
Plant Materials Program

Hoverson Germplasm deer pea vetch

Vicia ludoviciana Nutt.

A Conservation Plant Release by USDA NRCS E. "Kika" de la Garza Plant Materials Center, Kingsville, TX

Hoverson Germplasm deer pea vetch plant. Photo by Forrest Smith, SouthTexas Natives, Kingsville, TX.

Hoverson Germplasm deer pea vetch (*Vicia ludoviciana* Nutt.) is a selected plant material class of certified seed cooperatively released in 2012 by the *South Texas Natives* Project of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville, the USDA NRCS E. "Kika" de la Garza Plant Materials Center and Texas AgriLife Research Beeville.

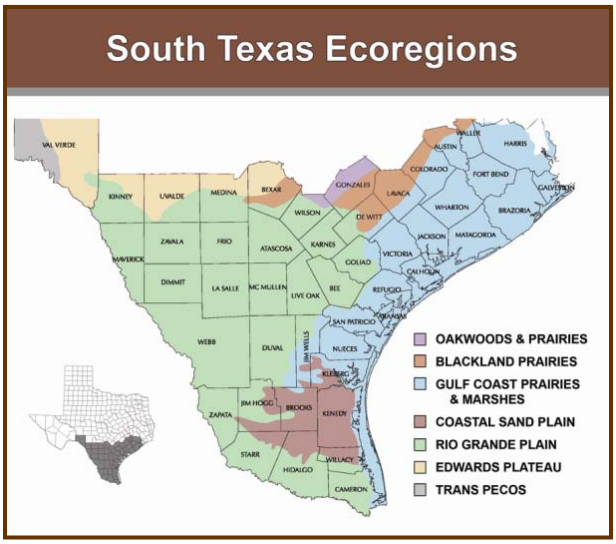
Description
Deer pea vetch is a cool season, annual legume that has climbing stems. Leaves are 3-9 cm long with 6 to 12 leaflets rachis terminating in a usually forked tendril. Flowers are generally solitary, and are lavender-blue in color. Pods are 2-3 cm. long, with 4 to 8 seeds in each pod. Seed is spherical in shape very hard and light brown in color with dark brown markings.

Source
Hoverson Germplasm deer pea vetch originated from LaSalle County in south Texas. This release is selected plant material class of certified seed. Hoverson Germplasm was selected for its high active germination, good competitive ability, and persistence. No breeding, selection or genetic manipulation was imposed with any of this material.

Conservation Uses
Hoverson Germplasm deer pea vetch is recommended for use in upland wildlife, highway right-of-way, energy exploration, and range plantings in south Texas. Deer pea vetch is a cool season annual legume that provides forage and seeds utilized during winter and spring by bobwhite quail, Rio Grande turkey, white-tailed deer, and livestock.

Hoverson Germplasm has shown excellent competitive ability with many introduced exotic grasses.

Area of Adaptation and Use



Hoverson Germplasm originated from a clay soil. Best performance of this seed source has been observed on medium to heavy textured soils. The area of known adaptation of Hoverson Germplasm includes the Rio Grande Plain, Gulf Coast Prairies and Marshes, and Edwards Plateau Ecoregions of Texas.

Establishment and Management for Conservation Plantings
Seedbed preparation should begin well in advance of planting. Planting should be done in late fall to early winter in South Texas. Deer pea vetch can also be included in warm-season planting mixtures, but will not establish until the fall after planting. Establish a clean, weed-free seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture.

Deer pea vetch can be seeded using a drill or broadcaster. If broadcast seeded, some type of additional coverage such as culti-packing or light dragging is recommended to ensure good seed to soil contact.

Seed should be planted 1/8 to 1/4 inch deep. It is better to plant too shallow than too deep. For calibration purposes, Hoverson Germplasm deer pea vetch contains approximately 66,000 seeds per bulk pound. A seeding rate of 5-10 pound of pure live seed (PLS) per acre is recommended. Seed should be inoculated prior to planting

with specific rhizobia selected for use with the plant. Hoverson Germplasm has shown rapid emergence in most planting trials, and provides a cool season legume component to seed mixes.

Areas planted to Hoverson Germplasm should be deferred for 30 days to allow plants to become established. Established plants should be allowed to produce seed annually because in many areas with proper soil moisture deer pea vetch readily reseeds itself with minimal soil disturbance. As perennial cover increase on most sites deer pea vetch decreases without soil disturbance.

No severe insect or disease problems have been observed in deer pea vetch once established. Cold tolerance of this germplasm beyond the area of intended use is unknown.

Ecological Considerations
There are no known environmental concerns with deer pea vetch.

Seed and Plant Production
Seed increase plots have been managed by flat drill planting on 8" rows. It can also be grown from transplants planted in the late fall. Harvesting when 50% of the seed is ripe allows for some seed to shatter allowing stand to reseed itself for subsequent years of harvest.

Seed can be harvested using a combine with a grain header. This harvest method will result in both green and mature seed, as well as other high moisture material in the harvested product. Most of the green seed will mature, but care must be taken to insure adequate seed drying procedures are followed to prevent molding and heating of this mixture. Seed harvested with this method is best cleaned by hammer milling to release seed from un-opened pods, then screened using a Clipper seed cleaner.

Well managed seed fields of Hoverson Germplasm have produced 200 bulk pounds of clean seed per year. Purity of the seed is usually around 70% and germination rates average near 90%. Hoverson Germplasm typically has 50% dormant seed, however after scarafiction active germination is increased to 90%. It produces one seed crop per year when grown in south Texas.

Availability
For conservation use: Initially seed will be produced exclusively by Douglass King Seed Company, San Antonio, TX and Pogue Seed Company, Kenedy, TX.

For seed or plant increase: Seed of the Hoverson Germplasm deer pea vetch will be identified by USDA NRCS accession number 9109630. First generation (G0) seed will be produced and maintained by South Texas Natives. Seed production fields have a 5 year production limit.

For more information, contact:
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Citation
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For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <http://www.nrcs.usda.gov/>, and visit the PLANTS Web site <http://plants.usda.gov> or the Plant Materials Program Web site <http://www.plant-materials.nrcs.usda.gov>