

The Importance of Seed Collecting
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Have you ever wondered where the plants came from that are planted in our conservation mixes? Releases from Plant Materials Centers and other private organizations initially come from individual seed collections. Seed collections are the first step in an extensive process that brings new plant materials to address individual resource concerns. Taking the time to identify superior plants and collecting the seed is crucial for solving these resource concerns.

Seed collection involves four steps. The first step is to identify the species. Species being collected by Texas Plant Materials Centers are located at http://www.tx.nrcs.usda.gov/technical/pmc/plant_collection_11.html. It is important to learn as much information as possible about different plant species. This will eliminate a bad seed collection due to miss-identification, seed immaturity and seed damage from disease or insects. The second step is to locate collection sites. When a desired plant is found, make notes or record GPS readings to ensure the plant can be found later. Collection sites need to be undisturbed areas such as woods, power line and railroad right of ways and known prairie remnants. Avoid areas that may have been commercially planted in the past such as roadsides and highway medians. Next, the collection site needs to be monitored. With the information learned in step one, determine the optimal collection time. Seed collections can be ruined if seed is harvested too early or too late. A general rule is that most seed will mature within 4-6 weeks after bloom. The final step is to collect the mature seed. A good seed collection will come from at least 30 different plants, although more is even better. Seed collections should consist of as much mature seed as possible, but always leave some seed so that reseeding can occur in the area. Once seed is collected, it should be air dried and placed in a paper bag or seed collection envelope. A plant collection form located at <http://www.tx.nrcs.usda.gov/technical/pmc/docs/ecs580.pdf> should be filled out and sent with the collection. The form provides information about the site where the collection was found. GPS coordinates are important because in some instances, additional seed may be needed and the exact place can be easily found. Seed should not be stored in a plastic bag as this can cause mold and rotting of the collection. Paper bags or envelopes work the best for storing the collection. The seed should then be sent to the plant materials center or organization that is making the collection. Upon arrival at the plant materials center, a unique accession number will be assigned permanently to each collection and testing can begin.



Morphological Characteristics:

- Perennial, cool-season bunchgrass
- Grows 24-36 inches tall
- Reproduces by seed mostly from April to June
- Leaves may be 3-10 mm wide and can either be smooth or have hair
- Panicle is 10-26 cm long with lower branches usually compound, spreading, or ascending
- Found on Edward's Plateau and North Central Texas regions
- Grows in open woods, moist canyon slopes and bottoms, rocky grasslands, and along stream banks
- Prefers partial shade and calcareous or sandy loam soils



Morphological Characteristics:

- native, multi-stemmed, spreading legume
- warm season perennial
- stems are 2-10mm in length and are prostrate to suberect
- petioles are 2-5mm long
- leaflets are narrowly elliptic or linear
- distribution is in post oak savannah, blackland prairies, cross timbers and prairies, Edwards plateau, and rolling plains
- found on prairies and open ground, rocky and clayey areas
- fruit is long, narrow, and bunched on the end of the stems
- flowering occurs from late May through June

Conservation Use:

Texas Plant Materials Centers have identified this plant as having potential benefits to the following conservation practice standards: 645 Upland Wildlife Habitat Management; 342 Critical Area Plantings; 562 Recreation Area Improvement; 550 Range Planting; 512 Pasture and Hay Planting.

Scientific Name: *Panicum virgatum*
Common Name: Switchgrass



Photo Credit: Brandon Carr

Morphological Characteristics:

- Stems are erect 3 to 10 ft tall, robust, with short rhizomes; stems firm and tough
- The rhizomes are scaly and creeping
- Sheaths are rounded, often red to purplish at base; blades are 10-24 inches long and 1/8 to 9/16 wide, flat, elongate, adaxial surface at the blade base with a triangular patch of hair
- Distinguished from other warm-season grasses by the hair at the point where the leaf attaches to the stem at all stages of development.
- Panicle is 6-24 inches long, pyramid-shaped, open with seed borne on the tips of the branches; lower nodes with branches in whorls
- Spiklets have 2 florets, the lower florets are sterile or staminate, the upper florets perfect and fertile; the upper lemma 1/8-3/16 in long, and are smooth and shiny, the margins clasp the palea
- The glumes are unequal, acute to acuminate, the first glume is 3/4th the length of the second and encircles the base of the second glume
- The glumes, lemmas, and paleas are awnless
- Starts growth in March and April and seed matures late August through October
- Ripe seeds sometimes take on a pink or dull-purple tinge, and turn golden brown in the fall
- Reproduces from seed, rhizomes, and tillers

Scientific Name: *Eriochloa sericea*
Common Name: Texas Cupgrass



Photo Credit: Ricky Linex

Morphological Characteristics:

- native, an erect perennial bunchgrass
- warm season
- can be found in North Central Texas, the eastern portion of the Edward's Plateau and Rolling Plains, and the Rio Grande Plains
- reproduces by tillers and seed
- seed presses tightly against the seed head and appears to sit in a small cup
- leaves are 1/16 to 1/8 inch wide and 4 to 11 inches in length
- plant height 12-48 inches
- blooming occurs from April through October
- stem of seed head will have a zig-zag appearance after seed falls
- usually grows on a clay or clay-loam soils in prairies or roadsides

Conservation Use:

Texas Plant Materials Centers have identified this plant as having potential benefits to the following conservation practice standards: 327 Conservation Cover; 645 Upland Wildlife Habitat Management; 342 Critical Area Plantings; 562 Recreation Area Improvement; 550 Range Planting; 512 Pasture and Hay Planting; 332 Contour Buffer Strips; 393 Filter Strips; and 528 Prescribed Grazing. The planting of Texas cupgrass can provide excellent food and cover benefits for wildlife and livestock as well as help conserve our soil.