



woolgrass

Scirpus cyperinus, (L.) Kunth

Alternate Common Names

common woolsedge, woolgrass bulrush, cottongrass bulrush

Scientific Synonyms

Scirpus cyperinus (L.) Kunth var. *condensatus* Fernald, *Scirpus cyperinus* (L.) Kunth var. *erriophorum* (Michx.) Kunth, *Scirpus cyperinus* (L.) Kunth var. *laxus* (A. Gray) Beetle, *Scirpus cyperinus* (L.) Kunth var. *pelius* Fernald, *Scirpus cyperinus* (L.) Kunth var. *rubricosus* (Fernald) Gilly, *Scirpus erriophorum* Michx., *Scirpus rubricosus* Fernald, *Scirpus cyperinus* (L.) Kunth var. *andrewsii* (Fernald) Fernald, *Eriophorum cyperinum* L.

Functional Group

sedges and rushes

Family

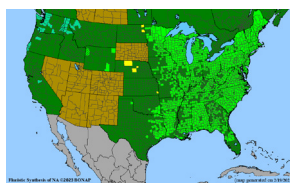
sedge family (Cyperaceae)

Description

- » **Life cycle/growth form:** Perennial with short rhizomes, forming dense, leafy clumps with tall flowering culms.
- » **Height:** 3-6 ft
- » **Leaves and stem:** Leaves grass-like; flowering stems are smooth, round to subtly 3-sided, and sturdy; old leaves accumulate to form tussocks.
- » **Flower/Fruit/seed head:** Clusters of 3-7 egg-shaped spikelets (each 1/3 in long) at the ends of slender branches in nodding, compound panicles 3-6 in long; spikelets are grayish green when in flower but mature to reddish brown; curly hairs on seeds expand when mature, making ripe seedheads look wooly.
- » **Pollination:** Wind



Habitat and Range



Moist to wet soil; partial to full sun; marshes, shorelines, swamps, seeps, sedge meadows, pond edges, ditches; Wetland Indicator Status is Obligate Wetland (OBL) for the

Midwest; irrigation is needed for seed production.

Conservation Status

Global- G5, secure; Nebraska- S1, critically imperiled; Kansas and Wyoming- S2, imperiled; Idaho and Montana- S3, vulnerable; in all other states within its natural range, status is S4 (apparently secure) to S5 (secure) or unranked (NatureServe).

General Comments

The combination of wooly seedheads and clustered spikelets help distinguish woolgrass from similar bulrushes in the genus *Scirpus*. The robust, tussocky clumps of woolgrass protect soil from erosion in the wetlands and ditches where it thrives. Its leaves, stems, and seedheads provide food and nesting sites for waterfowl and other wildlife. This species is not difficult to propagate from seed, and grows well under irrigation, but the wooly hairs around its “seeds” (achenes) present some challenges for seed harvest and cleaning.

Establishment for Seed Production (Appendix A)

Direct seeding:

Not recommended for this species.

Greenhouse:

- » **Seed pre-treatment:** Cold/moist stratification for 30 days.
- » **Sowing:** About 3 months before the last frost, surface sow in germination flats (our preferred method) or directly into plugs. Aim for 2-3 seeds per cell, but this can be difficult to judge with such tiny seeds. In either type of container, use caution when watering to avoid splashing seed from the soil surface. Seedlings are extremely tiny but fast growing. If started in germination flats, they can be dibbled into plugs using forceps.
- » **Transplanting:** When seedlings have grown into well-rooted plugs, move them outside to harden off, then transplant into irrigated, plasticulture rows at 12 inch spacing.

Stand Management

- » **Weeds:** Prepare clean, weed-free beds and use plastic mulch to suppress weeds in the establishment year. Plants are robust and leafy, suppressing many weeds. Mow or cultivate between rows. Hand rogue to remove problematic weeds.
- » **Pests:** None noted.
- » **Diseases:** None noted.

Seed Production (Appendix B)

- » **First harvest:** Plants flower and set seed the year after planting.
- » **Yield:** 40-60 pounds per acre (extrapolated from harvests of two production plots at TPC)
- » **Stand life:** Plants are likely long-lived, but we have not yet maintained plots for longer than three years. Yield from one plot declined from year 2 to year 3, and the plot was retired.
- » **Flowering date:** June in northern Iowa
- » **Seed maturity/Harvest date:** mid to late August in northern Iowa (the first harvest may occur later than normal)
- » **Seed retention:** Moderate risk of shattering when seedheads become “wooly.”
- » **Harvest date range at TPC (2011-2025):** August 14 - August 25
- » **Recommended harvest method:** Hand pick early maturing plants, then combine. We have had issues with the wooly hairs causing clumps to form on the combine sieves and pass out with the straw. We collected that material and passed it through a stationary combine to extract more seed.



Seed Cleaning Process (Appendix C)

Seed Characteristics (Appendix D)



tuft of wooly hairs at the base of each achene.

Released Germplasm

References