

Large Crabgrass

[*Digitaria sanguinalis* (L.) Scop.]

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Row Crop



Fig. 1. Large crabgrass in bloom on a roadside with other vegetation.



Fig. 2. Large crabgrass sheath with long hairs.

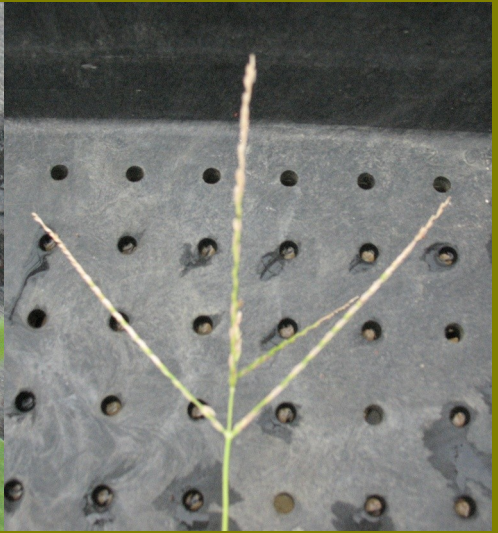


Fig. 3. Large crabgrass inflorescence.

Introduction

Problems Created

Large crabgrass [*Digitaria sanguinalis* (L.) Scop.], sometimes called hairy crabgrass, is an annual, spreading grass problematic in areas where grasses are desired, such as pastures, turf, and roadsides and disturbed areas like rowcrops and gardens throughout the MidSouth. Large crabgrass has also been used as a forage.

Regulations

Large crabgrass is not regulated as a noxious weed in the MidSouth.

Description

Vegetative Growth

Large crabgrass is an annual warm-season grass reaching around 3' in height with good conditions. Plants are caespitose, but mat-forming and rooting at the lower nodes. Lower nodes are hairy, but upper nodes may be smooth. Flowering shoots ascending with leaves usually flat, blades around 0.25" to 0.5" wide and 2" to 6" long. Blades are pubescent to rough, often with long hairs on leaf margins near the sheath. Sheaths are hairy (papillose-pilose), especially the lower sheaths. Ligules are membranous with a fringe of hairs, 2 to 3 mm long.

Flowering

Flowering occurs from July to October. The inflorescences are racemes, 3 to 9, and digitate. Racemes are 2" to 6" long, in 1 or 2 whorls, with a winged rachis (0.8 to 1 mm wide). Spikelets about 3 mm long in 2 or 4 rows on the rachis. The first glume is minute but evident and triangular; and the second glume, five-nerved, 2.8 to 3.2 mm, narrow and ciliate. Sterile lemma is strongly nerved, margins villous (but hairs are shorter than southern crabgrass), equal in length to the second glume. Fertile lemma and palea purplish, equal to second glume. Grain is 2 to 2.2 mm long.

Dispersal

Crabgrass typically does not disperse over large distances. However, human activity such as mowing and hay operations can transport crabgrass over large distances.

Spread by

Primary dispersal mechanism for crabgrass over larger distances is human activity.

Habitat

Large crabgrass can be a problem in pastures, waste areas, prairies, rowcrops, fields, turf, roadsides and gardens. It generally forms dense stands in open disturbed or thin canopy sites. Large crabgrass is common in many habitats and often confused with other crabgrass species. Fortunately, controls are generally similar for other crabgrass species. Large crabgrass seed germinate when soil temperatures at 4" reach 53 to 54°F for 24 hours. Germination is also dependent upon light and moisture.

Distribution

According to many sources large crabgrass is native to Europe; however, USDA-PLANTS (plants.usda.gov) indicates that it is native to the continental United States. Regardless, large crabgrass is widespread in the United States and also occurs elsewhere in temperate (including Canada) and tropical regions of the World.

Large crabgrass is widespread in all MidSouth states and under the right conditions it can be quite common in many habitats. Since crabgrasses are so common in turf, they are often the primary focus of spring preemergent grass weed control.

Control Methods

Biological

Since some crabgrass species are native and crabgrass has some forage value, no biological control strategies are in widespread use.

Chemical

Large crabgrass is problematic in many habitats. With so many chemical controls options and different habitats and crops, the list of chemical controls would be too extensive to discuss here. Refer to the Mississippi State University Extension Service weed control guidelines at <http://msucares.com/pubs/publications/p1532.html>.

Mechanical

Small patches may be mechanically removed by hand, although this method is labor intensive. In row crops or gardens, tillage may be an effective management tactic. However, this practice must be repeated on a regular basis to prevent reestablishment. Mowing removes a portion of the seed heads, but many seed heads may remain below the mower blade and produce seed.

Physical

Aside from weed barriers (cloth) or plastic, no physical controls for crabgrass are in widespread use.

References

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More Information

The Genus *Digitaria* belongs to the Grass (Poaceae or Gramineae) Family. Worldwide there are approximately 220 species of *Digitaria* with an estimated 27 species in the continental United States. Some species of *Digitaria* are native to the MidSouth, including southern crabgrass. Southern crabgrass is very similar to large crabgrass [*Digitaria sanguinalis* (L.) Scop.]. Southern crabgrass has longer spikelets and hairs on the nerves of the sterile lemma compared to large crabgrass. Other species of crabgrass, both native and exotic, may be confused with Southern crabgrass.

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