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Field Crop Weeds Grass Weed Seedlings

Cooperative Extension Service

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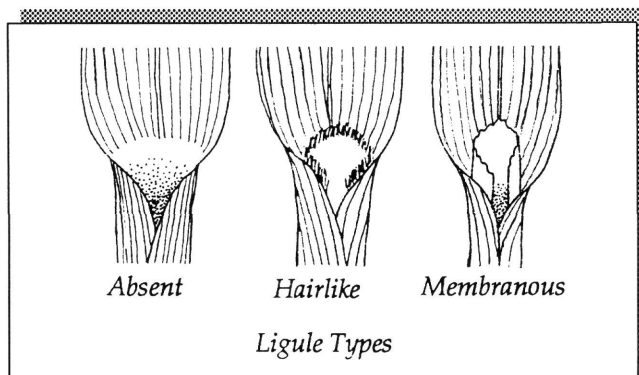
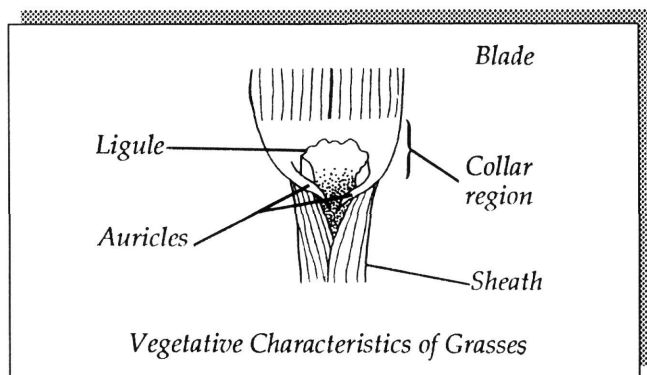
November 1989

2 pages

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FIELD CROP WEEDS GRASS WEED SEEDLINGS



The vegetative identification of weeds requires close examination with the aid of a hand lens. Grass plants are distinguished vegetatively by differences in their ligule, collar, leaf blade, leaf sheath, and auricles. The **ligule** is located on the inner side of the leaf blade and appears as an extension of the sheath at its intersection with the blade. Ligules are hairlike or membranous and vary in length and shape; some plants lack ligules. The **blade** is the part of the leaf that we usually think of as the leaf itself. The **leaf sheath** encloses the shoot (stem) and is connected to the leaf blade at the collar region. Blades and sheaths vary among species in hairiness, texture, and length to width ratio. The **auricles** are fingerlike projections that extend from the collar. Auricles, which may or may not be present, vary in length. Long auricles may cross one another and clasp the stem, as do quackgrass auricles.

The underground parts can also yield information. Plants emerging from **seeds** usually retain their seedcoat attached to the root system for some time after germination. You can find it if you carefully dig and remove the soil from the underground parts. Either annual or perennial plants may emerge from seed. However, if the plant is emerging from **rhizomes** then it is a perennial species.

BARNYARDGRASS, *Echinochloa crus-galli* (annual). **Ligule** is absent. **Collar** is broad and divided by a prominent midvein. **Leaf blade** is hairless and slightly keeled below. **Leaf sheath** is hairless to slightly hairy and may be flattened and reddish near the base of older plants. **Auricles** are absent.

GIANT FOXTAIL, *Setaria faberi* (annual). **Ligule** is hairlike. **Collar** is without a prominent midrib. **Leaf blade** is densely hairy on the upper surface and sparsely hairy to hairless on the underside. **Leaf sheath** is hairless to sparsely hairy. **Auricles** are absent.

GREEN FOXTAIL, *Setaria viridis* (annual). **Ligule** is hairlike. **Collar** is without a prominent midrib. **Leaf blade** is hairless. **Leaf sheath** is hairless to sparsely hairy. A few hairs may line the sheath margin. **Seed** is small and roundish (ovate).

YELLOW FOXTAIL, *Setaria lutescens* (annual). **Ligule** is hairlike. **Collar** is narrow and has no prominent midrib. **Leaf blade** has long hairs (3X the length of the ligule) on the upper surface near the base

of the blade only; the rest of the blade is hairless to the tip. **Leaf sheath** is hairless and may be flattened and reddish near the base of older plants. **Auricles** are absent.

FALL PANICUM, *Panicum dichotomiflorum* (annual). **Ligule** is hairlike. **Collar** has a prominent midrib. **Leaf blade** is hairless with a prominent midrib; blade of first leaf may be hairy but all subsequent leaves are hairless. **Leaf sheath** is usually hairless and may be flattened and reddish on older plants. **Auricles** are absent. **Seed** is small and narrow (oblong).

WILD PROSO MILLET, *Panicum miliaceum* (annual). **Ligule** is hairlike. **Collar** is without a prominent midrib. **Leaf blade** is densely hairy above and hairless to sparsely hairy beneath, with hairs protruding from the blade margins at a 90-degree angle. **Leaf sheath** is very hairy; hairs project at a 90-degree angle. **Seed** is large and roundish (ovate).

LARGE CRABGRASS, *Digitaria sanguinalis* (annual). **Ligule** is membranous. **Collar** has a fairly prominent midrib. **Leaf blade** is densely hairy on both surfaces and wider relative to its length than most other grasses. **Leaf sheath** is densely hairy and may be flattened on older plants. **Auricles** are absent.

SHATTERCANE, *Sorghum bicolor* (annual). **Ligule** is membranous, long, and jagged. **Collar** is without a prominent midrib. **Leaf blade** is hairless and of medium width. **Leaf sheath** is hairless and may be reddish on older plants. **Auricles** are absent. **Seed** is large and roundish (ovate).

JOHNSONGRASS, *Sorghum halepense* (perennial). **Ligule** is membranous, long, and jagged. **Collar** is without a prominent midrib. **Leaf blade** is hairless and narrow. **Leaf sheath** is hairless and may be reddish on older plants. **Auricles** are absent. **Seed** is large and narrow (oblong).

QUACKGRASS, *Agropyron repens* (perennial). **Ligule** is membranous, short, and jagged. **Collar** is narrow and without a prominent midrib. **Leaf blade** is hairless and rough-textured on the upper surface and hairless to hairy on the under surface. **Leaf sheath** may have sparse, short hairs. **Auricles** are long and slender, but they are difficult to find on mature leaves and are not present on plants emerging from seed until several weeks after germination.

FIELD CROP WEEDS

GRASS WEED SEEDLINGS



Barnyardgrass.



Giant Foxtail.



Green Foxtail.



Yellow Foxtail.



Fall Panicum.



Wild Proso Millet.



Large Crabgrass.



Shattercane.



Johnsongrass.



Quackgrass.
