

FALL PANICUM

(Panicum dichotomiflorum)

SEEDLING DESCRIPTION

Fall panicum seedlings have a smooth, erect, slightly oval stem, that is white, pale green, or purplish. Leaves are rolled in the bud and have a prominent white or pale green midvein. The youngest leaf blades are about $\frac{1}{8}$ inch (3 mm) wide and are usually smooth on both surfaces. Leaf blade margins are rough to the touch when stroked downward.

The ligule is a dense row of short, white hairs fused together for about half their length. Because the hairs are so tiny (only about $\frac{1}{32}$ inch or 1 mm long), the ligule is best seen with a hand lens. Auricles are absent.



1. Fall panicum seedlings resemble green foxtail seedlings.
2. Ligule hairs are fused along half their length.
3. Smooth, swollen nodes.
4. Basal stems often grow flat against the ground.
5. Fall panicum thrives in sunny locations.
6. Zigzag stem and large seed heads.



an alternate fashion. Fall panicum is basically an upright branching grass, but a portion of its outer stems often lie flat (decumbent habit). Roots grow from the enlarged lower nodes that touch the ground.

Leaf blades are lance-shaped, pointed (lanceolate), and have a prominent pale green midvein. Mature leaves are 1/2 to 1 inch (1.3 to 2.5 cm) wide and 6 to 18 inches (15 to 46 cm) long. Blades are dull on top and glossy underneath. The upper surface may be sparsely hairy, but both sides are usually smooth.

Fall panicum flowers from June to October and reproduces from seeds that mature in late summer and fall. The seed head grows 6 to 12 inches (15 to 30 cm) long and 3 to 6 inches (7.5 to 15 cm) wide. It has a distinctive pyramid shape and long, wispy flower stalks borne on a single axis.

When shed from the plant, seeds are dormant, and require a cold period of three to four months before they can germinate. Germination begins in late April or early May, and continues throughout the summer. Maximum germination occurs at a soil temperature of 80 °F (27°C). Plants that emerge early may produce ten times as much dry matter as plants that emerge in July, if competition from crops or other weeds is not severe. Peak growth takes place in late June and July, just before flowering.

Fall panicum grows in a diversity of habitats, including marshes, ditches, savannas, low woods, dry roadsides, and cultivated fields. It is a particular problem in corn and soybean crops, thrives in wet open areas of fields, and tolerates flooding.

SIMILAR SPECIES

Witchgrass (*Panicum capillare*) is closely related to fall panicum, but several characteristics make it possible to tell the two species apart. For example, witchgrass has a fuzzy stem and sheath, hairy leaf blades, and noticeable bristles 1/16 to 3/16 inch (1.5 to 2.5 mm) long on the lower third of the leaf blade margins. However, fall panicum is basically a smooth grass,

shaped like an open pyramid and has larger seeds. It is also coarser, and less dense than the witchgrass seed head.

Foxtail species are sometimes mistaken for fall panicum. Mature foxtails are easily distinguished from fall panicum by their bottlebrush-like seed heads. But seedlings of the two species are quite similar. Green foxtail and fall panicum seedlings look very much alike, as both have a short hairy ligule, no auricles, and scattered hairs on the upper surface of the leaf blade. The most reliable identifying characteristic is the leaf sheath. The upper margins of the leaf sheath of green foxtail are hairy, whereas the entire leaf-sheath margins of fall panicum are smooth.

NATURAL HISTORY

A native of North America, fall panicum flourishes throughout the United States except in parts of Texas and some areas of the north central and northwestern states. It has been blamed for causing nitrate poisoning and extreme sensitivity to light in livestock. This latter condition, called "photosensitivity," results in severe burning and peeling of any skin that is not protected from the sun.

Panicle, the name for the type of seed head produced by this grass, gives fall panicum both its common and scientific names. Because its seeds do not mature until late summer or autumn, the grass is commonly called fall panicum. *Dichotomiflorum* is a Latin word that refers to a distinguishing feature of fall panicum: the individual flowers (*florets*) are arranged in pairs.

Other common names for fall panicum include fall panicgrass, spreading witchgrass, spreading panicgrass, spreading panicum, sprouting crabgrass, and kneegrass. The last name aptly describes the nodes, which are swollen, slightly bent, and very shiny.

CONTROL

Fall panicum became a particular problem in corn fields when atrazine came into popular use in the 1950s and 1960s. Atrazine controls many weeds but has lit-

tle when they are small, and fall panicum does not tolerate shade. Therefore, establishing a crop canopy before the weeds emerge is one of the most effective controls and will greatly improve crop yield.

In corn, many commonly recommended herbicides are effective for preplant or preemergence control. Lasso, Dual, Bladex, or Prowl, give good results. Bladex is also effective for post-emergence control.

In soybeans, preemergence control is commonly achieved with Paraquat or metribuzin (Sencor or Lexone) in combination with Lasso, Dual, or Prowl. For postemergence control, Fusilade or Poast is recommended.

For specific recommendations, consult your county Extension agent or the most recent *Weed Control Manual and Herbicide Guide*, available through Meister Publishing Company, 37841 Euclid Avenue, Willoughby, Ohio 44094. Follow label instructions for all herbicides and observe restrictions on grazing and harvesting procedures.

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Where trade names appear, no discrimination is intended, and no endorsement by the Cooperative Extension Service is implied.

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