

## GIANT FOXTAIL

*Setaria faberi*



### Overview:

Giant Foxtail is an annual grass that reproduces by their seeds only. It is native to China but has become a competitive grass throughout North America and has the power to greatly reduce the yield of many crops. The aspect that makes this grass so hard to control is its adaptability to all types of soil and has a high tolerance to drought. One of the major problems with Giant Foxtail is that it has the ability to produce a lot of seeds that can start to grow without lying dormant for a period of time. If it has enough light, it can quickly take over an area of crops if not properly controlled.

### Identification:

Characteristic foxtail-like seedhead that droops when mature and leaves with many hairs on the upper leaf surface, which helps to distinguish this weed from both Green Foxtail (*Setaria viridis*) and Yellow Foxtail (*Setaria glauca*). Giant foxtail may be identified by the presence of many short hairs on the upper surface of the leaf blades, unlike the other foxtails.

Additionally, giant foxtail is generally larger and has a nodding seedhead, unlike the other foxtails.

**Stems:** Erect, round, usually without hairs, reaching 3 to 4 feet in height.

**Leaves:** Leaf blades may reach 16 inches in length and 15 to 25 mm in width, and are generally covered with many small hairs on the upper leaf surface, except near the leaf base. Auricles are absent and the ligule is a fringe of hairs reaching 3 mm in length.

**Roots:** A fibrous root system.

**Seedlings:** Leaves are rolled in the bud, leaf sheaths are mostly without hairs, but the leaf blades have many short hairs on the upper leaf surface and along the leaf margins. The ligule of the seedlings is a fringe of hairs approximately 1/2 mm long, often very difficult to see with the naked eye.

**Flowers:** The seedhead is a cylindrical, bristly panicle that becomes drooping with maturity. Spikelets are approximately 3 mm long, green, and each spikelet has 1-3 bristles that are 5-10 mm long.

### Prevention:

Prevention of Giant Foxtail is less expensive and less time-consuming than trying to control it. Make sure when you seed a new area that you do so with certified weed-free seeds. Giant Foxtail competes well with row crops such as soybeans and corn, meaning that a good crop rotation with solid stand crops like grasses or legumes can help contribute to control and/or prevention of this weed. If there is an infested area on your property, be sure to drive around instead of through it. Finally, make sure to give all equipment that has been in infested fields a good clean so that no seeds are transferred.

### Control:

**Cultural:** A cost effective way to prevent Giant Foxtail from spreading is to mow infested areas before the grass produces seeds. Here are a few steps that may help you to control this particular weed.

- Do the recommendations given to you by the soil test
- The field should be planted with high-yield varieties in narrow rows with high plant population as soon as ideal soil and weather conditions are met
- Provide nutrients necessary for early canopy closure and fast, hearty crop growth

**Chemical:** Due to the fact the Giant Foxtail germinates throughout the summer, full-season control is very difficult. If you apply herbicides very early in the season, most times it will lose its effectiveness when the Giant Foxtail reaches peak germination. As a result, Giant Foxtail causes more problems in fields that are planted

early in the season. Depending on your location, Giant Foxtail could be resistant to sulphonylurea and imidazolinone (WSSA group 2) herbicides.

**Biological:** None researched to date.



