

Foxtail Grasses (*Setaria* spp.)

DESCRIPTION:

Foxtail grasses are major agricultural pests that were accidentally introduced to North America from the early 1800's and early 1900's. Because they are extremely prolific, they are nearly ubiquitous in the seed bank and can be found in areas of disturbed ground such as agricultural fields, roadsides, lawns, fencelines, gardens, and urban waste areas. They can often show up in new plantings alongside native plants. Most germinate in late spring or early summer and are usually noticed when they develop their seed head in late summer. The exception to this is green foxtail, which can bloom as early as late spring. The seeds of green foxtail can germinate any time during the growing season meaning they can sprout up any time soil is disturbed and even produce multiple generations within the same growing season.

**-1
Minor
Pest**

IDENTIFICATION:

There are four common species of foxtail grass in our region. Three of them, giant foxtail (*Setaria faberi*), green foxtail (*S. viridis*) and yellow foxtail (*S. pumila*) are very similar in appearance, all with soft, hairy, cylinder shaped seed heads. Giant foxtail is larger (3-5' tall), with a longer seed head (up to 7") that tends to arch over as the seeds mature due to their weight. Yellow foxtail is somewhat smaller (1-3') generally with an upright form and fully erect seed stalk. Green foxtail is more variable; this species can be upright, but is often found sprawling widely in weedy lawns or urban waste areas.

Bristly foxtail (*S. verticillata*) is overly similar to the other foxtails but with shorter, bristle-like hairs on the seed heads. These hairs have small hooks on them that allow the seeds to cling to fur or clothing. All of these foxtail grasses have relatively broad leaves.

The native wild ryes (*Elymus* spp.) are somewhat similar to the foxtail grasses and can be confused with each other especially in seeded prairies. The wild ryes have more coarse hairs on their seed heads which lack the soft, fur-like texture found on most foxtail grasses, and the hairs on wild ryes are longer and less dense than those of foxtail grasses.



CONTROL METHODS:

As an annual, foxtail grasses are relatively easy to control in a garden or backyard setting by pulling up the plants and disposing of them before they have a chance to develop and spread seeds. The shallow roots of these plants makes this a relatively easy task. Organic herbicides that top-kill plants will be effective against this species.

For larger infestations such as in fields and newly established prairies, mowing immediately after the flower/seed heads develop, will prevent most seeds from maturing, though repeated mowings may be needed as the plant sends up new seed heads. Perennials such as native prairie species will eventually out-compete these weedy annuals if new soil disturbance is not introduced, however annual weeds like foxtail can greatly retard and even prevent the establishment of a seeded prairie if control measures are not taken.



NATIVE ALTERNATIVES:

Since this is a full-sun weed we recommend a diverse selection of prairie species to replace and compete against foxtail in order to develop a more stable and productive plant community for the site. Contact us for specific recommendations.