

**WRITTEN FINDINGS OF THE
WASHINGTON STATE NOXIOUS WEED CONTROL BOARD**

Scientific Name: *Aegilops cylindrica* Host

Common Name: Jointed goatgrass

Family: Poaceae (Gramineae)

Legal Status: Class C

Description and Variation: Winter annual grass, vegetatively similar to wheat in the seed stage. The leaves are alternately arranged with auricles at their base and occasional hairs extending along the margins. The flower spike is cylindrical and distinct from wheat. Two to four flowers are arranged in each of the spikelets which form the elongate cylindrical spike. It is jointed in appearance and each joint contains 1 to three seeds. The glumes on the top spikelet have long awns. Seed ripens before winter wheat and shatters easily.

Economic Importance: Highly competitive in winter wheat, CRP, and rangeland. Grain contaminated with jointed goatgrass cannot be certified. Fields rejected for jointed goatgrass remain ineligible for future production of certified classes of small grain seed until a reclamation program is developed. Jointed goatgrass is a serious problem in small grains because the similar seed size and weight makes for a very difficult job in separating goatgrass from small grain seed (especially wheat seed). This means clean fields may be easily contaminated with wheat seed containing goatgrass.

Geographical Distribution: Wheat producing areas of Pacific Northwest. Known to occur in every county in Eastern Washington.

Habitat: Wheatfields, grasslands, roadsides, fence rows, etc.

History: Introduced from Europe into the U.S. in the early 1900's, reported in the Pacific Northwest in 1917. Jointed Goatgrass is a noxious weed in Idaho, Oregon, Utah and California, as well as Washington.

Growth and Development: Winter annual resembles winter wheat during pre-seed set stages

Reproduction: Seed. Hybridization may occur with wheat. The hybrid then consists of spikelets of both wheat and jointed goatgrass. The seeds, when produced in hybrids are usually sterile.

Response to Herbicides: Non-selective herbicides do well, refer to current Pacific Northwest Weed Control Handbook.

Response to Cultural Method:

1. Make sure harvesting equipment is free of weed seed before moving it into fields.
2. Destroy small infestations of jointed goatgrass in winter wheat fields.
3. Change the crop for at least 2 years to a late spring crop, such as millet or sorghum. To prevent goatgrass seed production, the infested area must not be planted to fall-sown grains. Jointed goatgrass seed may remain viable in the soil for several years. Therefore, to prevent reinfestation, the crop must be changed for at least 3 years. It will help to rotate with such crops as sorghum, corn, other row crops, or a crop, such as millet, which is planted late in spring.
4. Use a winter wheat-fallow cropping sequence.
5. Do not let jointed goatgrass produce seed.
6. Prevent seed production of jointed goatgrass in areas near the field, such as in roadsides and waste areas.
7. If rain occurs near planting time, wait a few days for the jointed goatgrass seed to germinate. The new seedling plants can then be killed with tillage before you plant the wheat.
8. Plant clean wheat seed. Plant at the latest recommended date.
The seed is very difficult to separate from wheat. Length graders provide the most efficient method of separating jointed goatgrass seed from wheat. However, the process is slow and not 100-percent efficient.

Biocontrol Potentials: None

References:

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