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Controlling Wirestem Muhly

Michigan State University Extension Service

IPM Facts

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Wirestem muhly is found in fence rows and along roadsides. It sometimes persists in cultivated fields, but is most commonly found in no-till fields. Growth starts later in the spring than quackgrass. Wirestem muhly is more easily injured by frost than quackgrass.

What is a Perennial Weed?

A perennial weed is any weed capable of surviving for three or more years. Perennial weeds are characterized by vegetative reproduction. Vegetative reproduction in these species is due to (a) rhizomes - underground creeping stems commonly found in perennial grasses; (b) stolons - prostrate stems or runners on the soil surface with roots at the nodes; (c) creeping roots; (d) tubers - underground enlarged storage stems; or (e) bulbs - underground storage organs consisting of a stem axis covered with many overlapping leaf scales.

Perennial weeds may or may not reproduce by seed. They always, however, have the potential to reproduce by vegetative means.

Description of Wirestem Muhly

The rhizomes of wirestem muhly are short, creeping, and very scaly. Shoots are erect or grow along the ground and become erect at the tips. Stems range in length from 2 to 3 feet. Stems are smooth below joints, very tough, leafy, branch freely, and often root at the lower nodes. Leaves are flat, rough, pale green, scattered along the stem, and dense near the tip, giving the plant a brushy appearance. The seedhead is a panicle that barely protrudes from the leaf sheath.

Methods of Control

Methods of perennial weed control fall into three categories: (a) cultural, such as crop rotation; (b) mechanical, tillage including various implements such as plows, disks, or cultivators; and (c) chemical, using herbicides. Control of perennial weeds may require a combination of all these methods. Consider the energy and environmental implications when choosing a method of control.

Mechanical Control

Mechanical control may increase or decrease perennial weed infestations. Tillage may increase infestations by moving perennial weeds to new areas of the field or breaking dormancy of underground buds resulting in new shoot growth.

Tillage during cool, wet conditions results in reduced control.

Tillage may decrease perennial weed infestations if done frequently enough to deplete underground root reserves. The field should be tilled every two or three weeks. Warm, dry soil conditions increase the effectiveness of tillage for perennial weed control by drying plant roots on the soil surface.



Chemical Control of Wirestem Muhly

Soybeans

<u>Herbicide</u>	<u>Rate</u>	<u>Timing</u> ¹	<u>Effectiveness</u>
Assure II + COC ²	1/2 pt/A + 1%	POST	Excellent
Fusilade 2000 + COC ²	1 1/2 pt/A + 1 qt/A	POST	Good
Fusion + COC ²	1/2 pt/A + 1%	POST	Good
Poast + 28% N + Dash	1 1/4 pt/A + 1 gal/A + 1 qt/A	POST	Fair
Poast Plus + Dash	1.9 pt/A + 1 qt/A	POST	Fair
Select + COC ²	1 pt/A + 1 qt/A	POST	Fair

¹ Apply when wirestem muhly is 4 to 6 inches tall. A second application of these treatments or cultivation 14 to 21 days later may be required for satisfactory control.

² COC = crop oil concentrate

Corn

Cultivation will provide suppression.

Spot treatments and between crops

<u>Herbicide</u>	<u>Rate</u>	<u>Timing</u> ¹	<u>Effectiveness</u>
Roundup	2 qt/A	Fall or spring	Good
Roundup	2%	Spot treatment (see label)	Good

¹ Apply when western muhly is 8 inches or less in height. Spring applications will delay planting. For fall applications, check plants for frost damage before application.

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