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Controlling Johnsongrass

Michigan State University Extension Service

IPM Facts

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rhizomes cannot survive extremely cold temperatures. It is considered a perennial once it has produced a seedhead.

Johnsongrass was introduced as a forage, but has become a noxious weed. It can be found in cultivated fields, fence rows, and waste areas.

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 Johnsongrass

Johnsongrass is a warm season perennial grass with thick, white to pink, scaly rhizomes. Stems are erect, thick, and range from 1 1/2 to 6 1/2 feet tall. Leaves are alternate on the stem, smooth, 6 to 20 inches in length with a very large white midrib. There is a large papery ligule at the juncture of the leaf blade and sheath (collar). The seed head is purplish and ranges from 8 to 20 inches long. Seeds are 1/8 inch long, oval, reddish-brown, and have fine lines on the surface.

Johnsongrass can reproduce from seeds or rhizomes. The



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.

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

Chemical Control of Johnsongrass

Soybeans

<u>Herbicide</u>	<u>Rate</u>	<u>Timing</u>	<u>Effectiveness</u>
Assure II + COC ¹	10 oz/A	15-24" POST ²	Excellent
Fusilade DX + COC	12 oz/A	15-18" POST ²	Excellent
Select + COC	16 oz/A	15-18" POST ²	Excellent
Roundup Ultra + AMS or 28%N ³	1 qt/A	15-18" POST ⁴	Excellent
Poast + 28%N + Dash HC	1 pt/A + 1 gal/A + 1 pt/A	15-18" POST ²	Good
Poast Plus/Prestige + Dash HC	1.5 pt/A + 1 pt/A	15-18" POST ²	Good
Option II	1.0 pt/A	15-18" POST ²	Good
Treflan ⁵	1.5-2X for 2 yrs. ⁶	PPI	Fair
Prowl ⁵	1.5-2X for 2 yrs. ⁶	PPI	Fair

¹COC = crop oil concentrate.

²Make postemergence applications when johnsongrass is 15 to 18 inches tall. Retreat when 6-12" tall if regrowth occurs. Add nonionic surfactant or crop oil concentrate to postemergence applications (see label).

³Ammonium sulfate (AMS) at 17 lbs/100 gal or urea-ammonium nitrate (28% N) at 4%.

⁴For spot treatment only. Broadcast applications can be made to Roundup Ready soybean only.

⁵If using a Treflan or Prowl program, grow continuous soybeans for 3 years.

⁶1.5-2X = increase standard application by 50-100%.

Corn

<u>Herbicide</u>	<u>Rate</u>	<u>Timing</u> <u>(Weed height)</u>	<u>Effectiveness</u>
Accent + COC ¹ or NIS	0.67 oz/A	8-16" POST	Good-Excellent
Beacon + COC or NIS	0.76 oz/A	8-16" POST	Good
Eradicane ²	4.75 pt/A	PPI	Fair
Sutan Plus ²	4.75 pt/A	PPI	Fair
Poast Plus + COC or Dash HC (Poast Protected/SR Corn only)	24 oz/A	15-20" POST	Good ³

¹COC = crop oil concentrate; NIS = nonionic surfactant

²For seedling johnsongrass only.

³Retreatment may be necessary if regrowth occurs. Retreat before regrowth exceeds 12" tall.

Spot Treatments and Between Crops

<u>Herbicide</u>	<u>Rate</u>	<u>Timing</u>	<u>Effectiveness</u>
Roundup Ultra	2% (v/v)	Spot treatment (boot stage of johnsongrass)	Excellent

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To protect yourself and others and the environment, always read the label before applying any pesticide.

This publication contains pesticide recommendations based on research and pesticide regulations. However, changes in pesticide regulations occur constantly. Some pesticides mentioned may no longer be available, and some uses may no longer be legal. If you have questions about the legality and/or registration status for using pesticides, contact your county Extension office.



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