Controlling Johnsongrass
Michigan State University Extension Service
Michigan Energy Conservation Program for Agriculture and Forestry
Fred Salzman, Karen Renner, Jim Kells, Department of Crop and Soil Sciences
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MECP

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CONTROLLING JOHNSONGRASS

Fred Salzman, Karen Renner, and Jim Kells
Department of Crop and Soil Sciences
Michigan State University

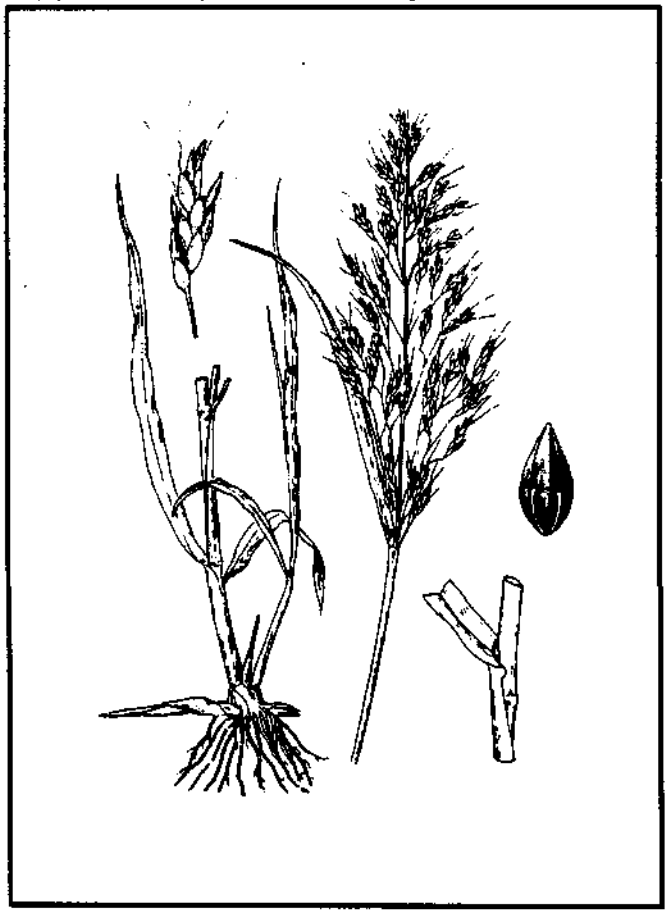
What is a Perennial Weed?

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 1½ to 6½ 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 in color and range from 8 to 20 inches long. Seeds are 1/8 inch long, oval, reddish-brown in color, and have fine lines on the surface.



Johnsongrass can reproduce from seeds or rhizomes. The 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.

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.

MECP is a cooperative effort of the:
Michigan Department of Agriculture - Michigan Soil Conservation Districts - USDA Soil Conservation Service
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Chemical Control of Johnsongrasss

Soybeans

Herbicide	Rate	Timing	Effectiveness
Treflan[1]	1 ½ - 2X for 2 yrs.[2]	PPI	Fair
Prowl[1]	1 ½ - 2X for 2 yrs.[2]	PPI	Fair
Assure + COC[3]	1¼ pt/A + 1%	POST[4]	Excellent
Fusilade 2000 + COC[3]	1½ pt/A + 1 qt/A	POST[4]	Excellent
Poast + 28% N + Dash	1¼ pt/A + 1 gal/A + 1 qt/A	POST[4]	Good
Option	1.2 pt/A	POST[4]	Good
Roundup		ropewick	Fair

[1] If using a Treflan or Prowl program, grow continuous soybeans for 3 years.
[2] 1½ - 2X = increase standard application by 50-100%.
[3] COC = crop oil concentrate
[4] Make postemergence applications when johnsongrass is 15 to 18 inches tall. Retreat if regrowth occurs. Add nonionic surfactant or crop oil concentrate to postemergence applications (see label).

Corn

Herbicide	Rate	Timing	Effectiveness
Eradicane	4¾ pt/A	PPI	Fair
Eradicane Extra	5 pt/A	PPI	Fair
Sutan Plus	4¾ pt/A	PPI	Fair
Evik	2 lb/A	POST DIRECTED	Fair
Gramoxone Extra + NIS[1]	0.8 pt/A + ¼%	POST DIRECTED	Fair

All treatments are for seedling johnsongrass only.
[1] NIS=nonionic surfactant

Spot treatments and between crops

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

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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 Cooperative Extension Service office.

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

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