

## **MSU Extension Publication Archive**

Archive copy of publication, do not use for current recommendations. Up-to-date information about many topics can be obtained from your local Extension office.

Controlling Swamp Smartweed

Michigan State University Extension Service

IPM Facts

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

Issued December 1992

2 pages

The PDF file was provided courtesy of the Michigan State University Library

**Scroll down to view the publication.**

## Controlling Swamp Smartweed

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

long. Seeds are oval, flattened on one side, black, shiny and slightly rough. The plant reproduces by seed and by tough, woody, horizontal rootstocks.

Swamp smartweed is often found in low, wet and/or muck soil areas in fields.

### What is 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 Swamp Smartweed

Swamp smartweed has erect stems 1 to 3 feet tall with enlarged nodes. Stems are usually unbranched.

Leaves are 2 1/2 to 8 inches long, pointed at the tip with a rounded base, and have prominent veins. A papery sheath, called the ochrea, surrounds the stem at the base of each leaf. Flowers are rose and are found in a compact erect spikes 1 to 3 inches

### 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

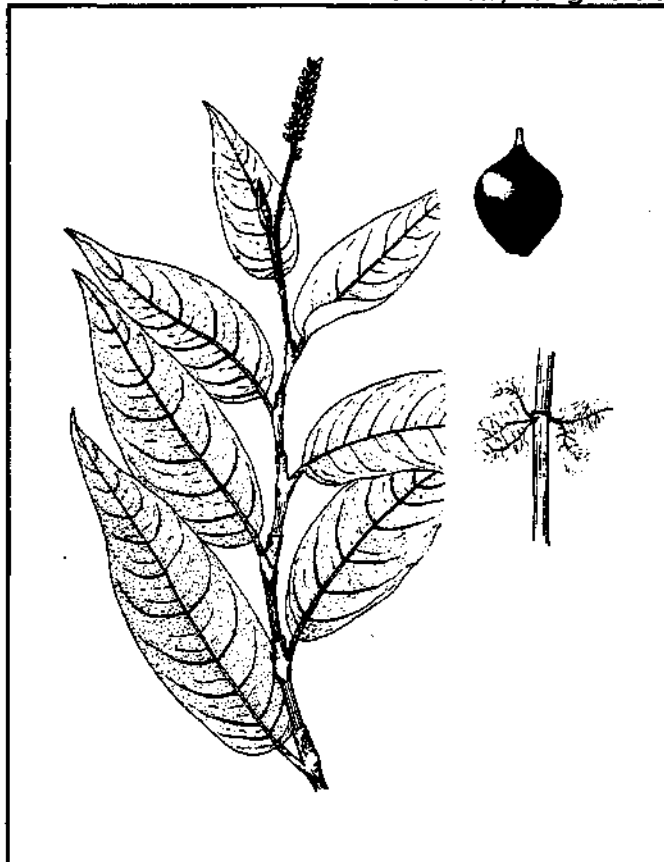
weeds may require a combination of all these methods. Consider the energy and environmental implications when choosing a method of control.

### 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 Swamp Smartweed

## Soybeans

<u>Herbicide</u>	<u>Rate</u>	<u>Timing</u> <u>(Weed height)</u>	<u>Effectiveness</u>
Lexone or Sencor 4L	1/2 pt/A	PPI or PRE	Fair
Basagran + COC <sup>1</sup>	1 qt/A + 1 qt/A	POST (up to 12")	Fair

<sup>1</sup> A second application of Basagran 14 to 21 days after the first application is suggested.  
COC = crop oil concentrate.

## Corn

<u>Herbicide</u>	<u>Rate</u>	<u>Timing</u> <u>(Weed height)</u>	<u>Effectiveness</u>
Banvel	1/2 pt/A	8"	Fair
2,4-D amine	1 pt/A	8"	Poor-Fair

## Spot treatments and between crops

<u>Herbicide</u>	<u>Rate</u>	<u>Timing</u> <sup>1</sup> <u>(Spot treatment)</u>	<u>Effectiveness</u>
Roundup	2%	Bud to bloom stage of swamp smartweed	Good
Roundup	3 qt/A	Late summer/fall	Good
Roundup + AMS <sup>2</sup>	2-3 qt/A + 2%	Late summer/fall	Good
Roundup + Banvel + NIS <sup>3</sup>	1 qt/A + 1 pt/A + 1/2%	Late summer/fall	Good

<sup>1</sup> Spring applications only provide suppression for one year.

<sup>2</sup> AMS=ammonium sulfate at 2% by weight or 17 lb/100 gal.

<sup>3</sup> NIS=nonionic surfactant

This bulletin was prepared with the support of the U.S. Department of Energy, Grant No. DE-FG0276CS60204. However, any opinions, findings, conclusions or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of DOE.

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 Cooperative Extension Service office.



MSU is an Affirmative-Action Equal Opportunity Institution. Cooperative Extension Service programs and materials are open to all without regard to race, color, national origin, sex, handicap, age or religion. ■ Issued in furtherance of Cooperative Extension work in agriculture and home economics, acts of May 8 and June 20, 1914, in cooperation with the U.S. Department of Agriculture. Gail L. Imig, director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824. ■ This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by the Cooperative Extension Service or bias against those not mentioned. This bulletin becomes public property upon publication and may be reprinted verbatim as a separate or within another publication with credit to MSU. Reprinting cannot be used to endorse or advertise a commercial product or company. *Produced by Outreach Communications and printed on recycled paper using vegetable-based inks.*

