

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 Horsenettle

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

Issued May 1990

2 pages

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

Scroll down to view the publication.



CONTROLLING HORSENETTLE

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 Horsenettle

Horsenettle has erect or ascending stems, either unbranched or branched, that reach a height of 1 to 4 feet. Leaves are oblong, wavy-edged, or lobed. Sharp prickles are found on the stems, leaf petioles, midribs, and veins. Flowers are white or bluish, 5-lobed, approximately 1-inch in diameter, and are found in clusters. Seeds are found in distinctive yellow, juicy berries, that range from 3/8- to 5/8-inch in diameter. The berries are smooth

early in the season, but later become wrinkled. Seeds are 1/16 inch in diameter, round, flattened, and yellow in color. Horsenettle reproduces by seed and creeping rootstock.

Horsenettle can be found in cultivated fields and pastures, and prefers sandy soils.

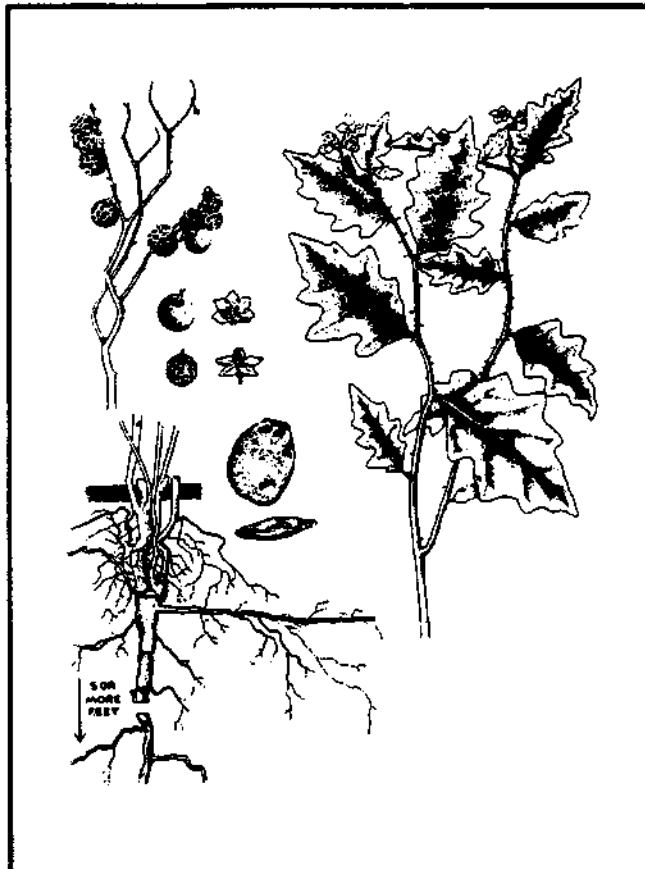
Methods of Control

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 Horsenettle

Soybeans

Cultivation will suppress growth.

Corn

<u>Herbicide</u>	<u>Rate</u>	<u>Timing (Weed height)</u>	<u>Effectiveness</u>
Banvel	½ pt/A	8"	Good
2,4-D	1 pt/A	8"	Good

Spot treatments and between crops

<u>Herbicide</u>	<u>Rate</u>	<u>Timing (Weed growth stage)</u>	<u>Effectiveness</u>
Roundup	2%	Spot treatment (late bud to flower)	Good
Roundup	3 qt/A	Late bud to flower	Good
Banvel	1-2 qt/A ¹	Late bud to flower	Good
2,4-D ester	2 qt/A	Late bud to flower	Good

¹ Banvel at 1 qt/A will provide suppression; 2 qt/A will provide control.

"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"

MSU is an Affirmative Action/Equal Opportunity Institution. Cooperative Extension Service program are open to all without regard to race, color, national origin, sex or handicap.

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.

Issued in furtherance of Cooperative Extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture, J. Ray Gillespie, Interim 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.