

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 Smooth Groundcherry and Clammy Groundcherry

Michigan State University Extension Service

IPM Facts

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

Revised January 1998

2 pages

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

Scroll down to view the publication.

Controlling Smooth Groundcherry and Clammy Groundcherry

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

berries are yellow. Berries contain numerous small, yellow, flattened, oval seeds. Clammy groundcherry can be distinguished by its hairy stems and leaves, while smooth groundcherry is smooth to sparsely hairy. Clammy groundcherry stems are more branched, thus the plant appears bush-like. Both species reproduce by seeds and rootstocks.

What is a Perennial Weed?

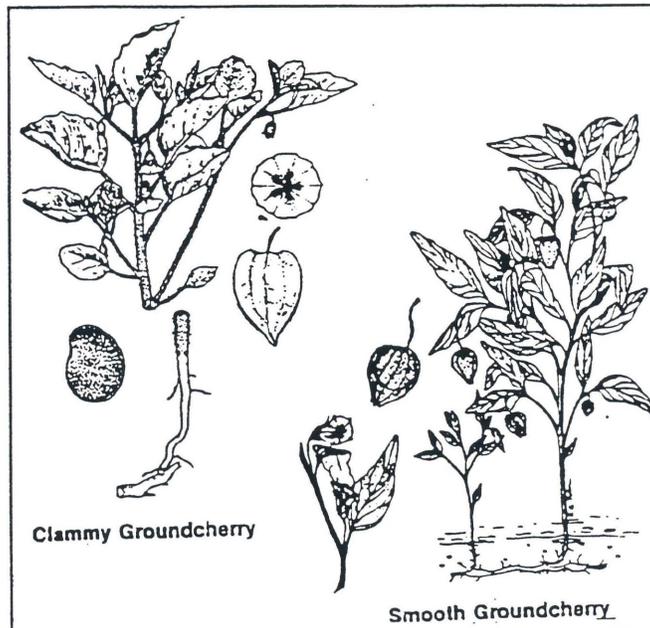
A perennial weed is any weed capable of surviving for three or more years. Perennial weeds are characterized by vegetative reproduction.

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 Groundcherry and Clammy Groundcherry

Smooth groundcherry and clammy groundcherry are closely related species. Some characteristics are common to both species: Stems are 1 to 3 feet tall and erect. Leaves are 2 to 3 inches long and slightly round-toothed. Flowers are bell-shaped, yellow to yellow-green with purple to brown centers, and are about 3/4 inch in diameter. A round berry is produced that is enclosed with a papery covering resembling a Chinese lantern. The berry of smooth groundcherry is red to purple, while clammy groundcherry



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 Smooth and Clammy Groundcherry

Soybeans

<u>Herbicide</u> ¹	<u>Rate</u>	<u>Timing</u>	<u>Effectiveness</u>
Blazer + NIS ²	1.5 pt/A	2-4" POST	Poor
Cobra + COC ²	0.78 pt/A	2-4" POST	Poor
Roundup Ultra + AMS or 28%N ³	1 qt/A	POST ⁴	Fair-Good

¹These treatments only suppress top growth.

²NIS = nonionic surfactant; COC = crop oil concentrate.

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.

Corn

<u>Herbicide</u>	<u>Rate</u>	<u>Timing</u> (Weed height)	<u>Effectiveness</u>
Banvel	0.5 pt/A	8" POST	Fair-Good
Banvel + 2,4-D amine	0.25 pt/A + 0.5 pt/A	8" POST	Fair-Good
2,4-D amine	1 pt/A	8" POST	Fair-Good

Spot Treatments and Between Crops

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

¹Roundup Ultra is not labeled for control of clammy or smooth groundcherry.

²Banvel 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-FG276CS60204. 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 Extension office.



MSU is an affirmative action/equal opportunity institution. Michigan State University Extension educational programs and materials are available to all without regard to race, color, national origin, sex, disability, religion or age. ■ Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Arlen Leholm, Director, MSU Extension, East Lansing, MI 48824. ■ This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension 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 advertise a commercial product or company.