"Exploiting the Vulnerabilities of Weeds" March 7, 2023 10 am – 3:35 pm

Italian-American Community Center, 257 Washington Ave. Ext., Albany, NY 12205
Cornell Cooperative Extension
Eastern NY Commercial Horticulture
Capital Area Agriculture & Horticulture Program

10 am – 10:40 am – "How cultural practices for weed management have been successful...

- o 20 min, ...on my vegetable farm" Jean Paul Courtens
- o 20 min, ...on my field crop farm Thor Oeschner

10:40 am – 11 am Basic Weed Biology – CCE Educators

11 am – 12 pm Vulnerabilities in Weed Biology, Caroline Marschner

Noon Lunch −1 pm, 1 hour

1 pm – 1:25 pm Reducing Weed Seedbanks to Manage Weeds & Seed Predators, Bryan Brown

1:25 pm – 2 pm Timing of Herbicides & Weed Technologies in the Near Future, Lynn Sosnoski

2 pm – 2:40 pm (5 minutes to shuffle to concurrent sessions)

- Concurrent 30 min "Making Cultivation Work on Your Farm", Bryan Brown
- Concurrent 30 min Mulch, Tarping, Anaerobic Methods, Crystal Stewart Courtens & Laura McDermott

(5 minutes to shuffle back to the main room)

- 2:40 pm 3:25 Planning Cropping Systems to Exploit Weed Vulnerabilities, via Zoom, Adam Davis, U of Ill
- 3:25 pm 3:35 Speaker panel Q & A (all speakers to be available for questions and discussion) until everyone's questions are asked

<u>Manage Weeds On Your Farm – A Guide to Ecological Strategies</u>

https://www.sare.org/resources/manage-weeds-on-your-farm/

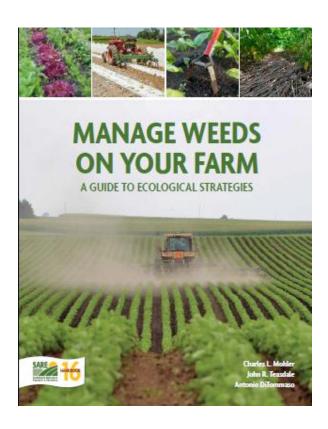
Manage Weeds On Your Farm

A Guide to Ecological Strategies

SARE Outreach
Charles L. Mohler, John R. Teasdale, Antonio
DiTommaso | 2021 | 416 pages

PDF (11.6 MB) free Order in Print \$24.00

or call (301) 779-1007 to order.



The Essential Weed ID Library

"Weeds of the Northeast", BY JOSEPH C. NEAL, RICHARD H. UVA, JOSEPH M. DITOMASO AND ANTONIO DITOMMASO 2nd edition, \$32.95 paperback, https://www.cornellpress.cornell.edu/book/9781501755729/weeds-of-the-northeast/#bookTabs=1

"A Guide to Plant Poisoning to Animals in North America" By Anthony P. Knight & Richard G. Walter, PDF at https://www.ivis.org/library/guide-to-plant-poisoning-of-animals-north-america, or paperback (\$53) thriftbooks.com, amazon.com or other bookstores.

"Weed ID Guide for Ontario Crops", By Mike Cowbrough, Francois Tardif, Jocelyne Letarte. Free download or purchase paperback (\$50 Canadian). https://horttrades.com/weed-id-guide-for-ontario-crops

"Broadleaf and Grass Seedlings Identification Keys", PDF at https://drive.google.com/file/d/1fKmfpxkZvTX5HHcDDCJOTkPa8u9FKGyz/view

"Weed Identification Tools and Techniques", online at https://eorganic.org/node/2732

ONLINE RESOURCES

Cornell Weed ID blog, https://blogs.cornell.edu/weedid/common-ny-agricultural-weeds-management-strategies/

Cornell Weed Profiles, https://cals.cornell.edu/weed-science/weed-profiles

"Pigweed Identification (A Quick Guide)" UC ANR, Dr. Lynn Sosnoski, https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=27466

"Selected Knapweeds of Washington State", PDF, https://www.nwcb.wa.gov/pdfs/Knapweed-2010.pdf

Weed and Plant Identification Apps

These apps may be useful, but they aren't foolproof. Read the article about the MSU student evaluation for more information. The other caveat is make sure that you know the cost. Most of these are purchased tools – but it's very difficult to determine the actual price.

- 1) <u>PictureThis</u> <u>https://www.picturethisai.com/</u> 10,000 'local' species not all weed ID. Includes general plant ID. 7 Free days couldn't find actual cost of subscription. Rated the highest in MSU study.
- <u>PlantNet</u> https://identify.plantnet.org/ interesting options for non-domestic plant ID. Allows user to contribute photos to resource. Unsure of cost?
- <u>3) iNaturalist</u> https://www.inaturalist.org/ crowdsourcing platform. Usable on all device types. The account is free, but may have to buy the app. Also offers insect, animal, bird ID.
- <u>4) Seek https://www.inaturalist.org/pages/seek_app</u> now supported by iNaturalist.
- **5)** PlantSnap https://www.plantsnap.com/ personal use with this app is reported to be guite low in terms of accuracy. It's easy to use.
- <u>6) LeafSnap</u> https://plantidentifier.info/ This app also focuses on cultivated plants, but does have weeds in it's library.
- <u>7) GardenAnswers</u> https://www.gardenanswers.com/ not just plant ID.
 Gives gardening advice along with plant ID.
- 8) PlantStory https://plantstory.app/ Definite commercial focus on ornamental plants including options to purchase plants online.

Program Evaluation – Exploiting the Vulnerabilities of Weeds 2023

Please tell us how useful the presentations were and what you learned and will implement in your farm or business:

How cultural practices for weed management have been	Very	Somewhat	Not
successful on my farm, Jean Paul Courtens, Thor Oeschner	Useful	Useful	Useful
Specifically learned / will implement:			
Basic Weed Biology, Extension Educators	Very	Somewhat	Not
Busic Freed Biology, Extension Educators	Useful	Useful	Useful
Specifically learned / will implement:	•	1	•
Vulnerabilities In Weed Biology – Caroline Marschner	Very	Somewhat	Not
	Useful	Useful	Useful
Specifically learned / will implement:	•		
Reducing Weed Seedbanks To Manage Weeds – Bryan Brown	Very	Somewhat	Not
neading week secasamo to manage weeks. Bryan Brown	Useful	Useful	Useful
Specifically learned / will implement:		L	l
Seed Predators – Dr. Bryan Brown	Very	Somewhat	Not
	Useful	Useful	Useful
Specifically learned / will implement:		L	l
	Ι.,	T	1
Timing Herbicides, Dr. Lynn Sosnoski	Very Useful	Somewhat Useful	Not Useful
	Useiui	Useiui	Useiui

Specifically learned / will implement:					
Specifically learned / will implement.					
Weed Technologies In The Near Future, Dr. Lynn Sosnoski	Very	Somewhat	Not		
, ,	Useful	Useful	Useful		
Specifically learned / will implement:					
	1,,		T :		
Making Cultivation Work On Your Farm, Dr. Bryan Brown	Very	Somewhat	Not		
	Useful	Useful	Useful		
Specifically learned / will implement:					
Specifically learned / will implement.					
Mulch, Tarping, Anaerobic Methods, Crystal Stewart, Laura	Very	Somewhat	Not		
McDermott	Useful	Useful	Useful		
Modernott	Osciai	Osciai	Osciai		
Specifically learned / will implement:					
		ı	1		
Planning Cropping Systems to Exploit Weed Vulnerabilities, Dr.	Very	Somewhat	Not		
Adam Davis	Useful	Useful	Useful		
Specifically loarned / will implement:	1				
Specifically learned / will implement:					
How were the meeting facilities and meal? Very Good Satisfactory Not Satisfactory					
Comments:					
Comments.					

Suggestions for future pesticide recertification courses or for CCE in general?