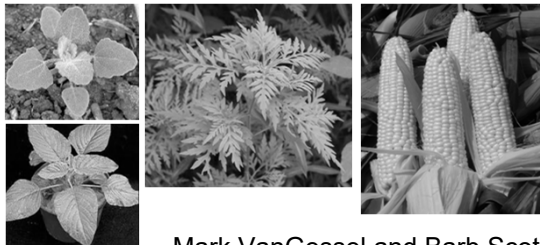


Update on Weed Management for Fresh Market and Vine Crops



Mark VanGessel and Barb Scott
Extension Weed Science
Georgetown, DE



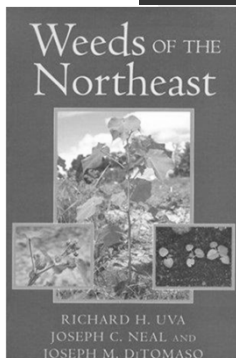
Topics

- Resources
- Updated Veggie Guide
 - Double check 24c's
- Paraquat changes
- First year of a tarp trial



2020/2021 Mid-Atlantic Commercial Vegetable Production Recommendations

- Delaware**
University of Delaware Cooperative Extension (EB137)
- Maryland**
University of Maryland Extension (EB-236)
- New Jersey**
Rutgers Cooperative Extension (E001)
- Pennsylvania**
Penn State Extension (AGRS-028)
- Virginia**
Virginia Cooperative Extension (456-420)
- West Virginia**
West Virginia University Extension Service



Excellent Internet Resources for Weed ID

- Virginia Tech Weed Science:
www.ppws.vt.edu/weedindex.htm
- Ohio Perennial and Biennial Weed Guide:
<http://www.oardc.ohio-state.edu/weedguide/>
- Weed Herbarium at UMassAmherst:
<https://extension.umass.edu/landscape/weed-herbarium>
- ID Weeds from University of Missouri
<http://weedid.missouri.edu/>



24c Labels

- Special Local Needs
- Granted by individual states
- Some have expiration dates others do not
- Be sure the specific label is valid for use and state
- Granted only for specific products
 - If labeled for Gramoxone 3SL, other formulations of paraquat are NOT allowed unless they have received their own registration

Paraquat Requirements

- Paraquat dichloride

GROUP 22 HERBICIDE

Gramoxone[®]

HELMQUAT 3SL

PARAZONE[®]
3SL Herbicide

Quik-Quat[™]

Paraquat Requirements

- Restricted Use Pesticide
- Additional Certified Applicator Training
 - Training valid for 3 yrs
 - Available on-line
 - Mixing/loading, applying, transporting, disposal



- www.campus.extension.org

Paraquat

- All products require closed system
- Allowed to sell and use existing stock that does not meet the “closed system” standard until stocks run out

Paraquat

- Be sure to check the product and adjust rates
 - SL 2.0 (2 lb gal) 1.5 pts/A
 - SL 3.0 (3 lb gal) 1.0 pts/A



Field Trials

- Cole crops with experimental herbicides
- Herbicide trials for pumpkins
- IR-4 projects looking at row middles of cucurbits grown with plastic mulch
 - New use of existing herbicides
- Potential POST herbicides for sweet potato
- Herbicide options for reduced or no-till vegetables
- Comparison of POST sweet corn herbicides

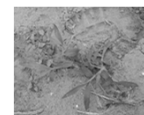
Sweet Corn Group 27 herbicides

	Snap bean	Tomato	Watermelon	Squash
Shieldex	9	9	12	12
Laudis	10	10	18	18
Callisto	10	18	18	18
Impact or Armezon	9	18	18	18



Sweet Corn

- Good crop safety with all four herbicides
- Similar postemergence control of broadleaf weeds
 - All were better with atrazine
- Grass control
 - Impact/Armezon > Laudis >> Shieldex >> Callisto



“Tarp” Trial

- Fall tillage with cover crops
- Kill cereal rye with tarping
 - Will it increase weed emergence?
- Will soil be in condition to use push planters?



“Tarp” Trial

1. Moldboard plow in fall fb cereal rye
 2. Rototiller in fall fb cereal rye
 3. Cereal rye, spring glyphosate, spring rototiller
 4. No fall management, spring rototiller
- Used 6 mil 150' by 24' silage bunker covers
 - Reusable
 - Planted sw. corn, broccoli, and spinach



Preliminary Observations

- 3 wks was not long enough for killing all rye
 - Soil temps did not rise as expected
- Able to plant NT with push planter
- Fall plowing reduced Palmer amaranth density
- Took longer to weed fall rototill with rye than other plots
- Hoeing NT with rye was similar to spring tillage

Thank you to:



**Specialty Crop Block
Grant Program**

Questions ??

