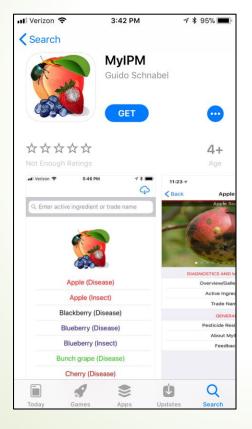
Weed Control Update in Strawberry



Katie Jennings North Carolina State University August 19, 2020

The MyIPM App

Apple Store or Google Play





Research



HERBICIDE

Weed Control with Embed Extra



Vetch



Cutleaf eveningprimrose



Clover



Chickweed



Carolina geranium



Curly dock

Potential Option for Row Middle Weed Management

Curly dock



Will not injure ryegrass like paraquat and glyphosate

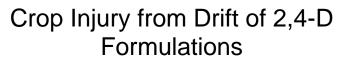
Embed Herbicide

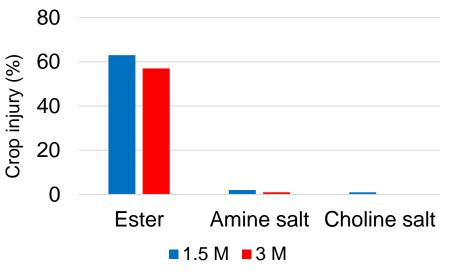


HERBICIDE

• Determine effect on:

- Strawberry growth
- Fruit yield and quality
- Why Embed?
 - Minimal drift and near zero volatility
 - Excellent weed control





Sosnoskie et al. 2015

Embed Extra Summary

- Less than 5% injury on strawberry foliage
- No effect on plant growth or fruit yield
- No effect on pH or Brix
- No effect on titratable acidity

Update on Weeds

Tumble Pigweed, Palmer amaranth, andImaranthCommon Purslane

Palmer amaranth



Common purslane





Row Cover Weed Management

Before applying a row cover remove all weeds. Weeds will thrive under a row cover.



Photo courtesy of Poler's Berry Farm

Control Weeds in Field After Harvest and Along Field Edges

Control weeds (before they produce seeds) in the field and along the field edges.





Broadturn Farm

Herbicides for Strawberry

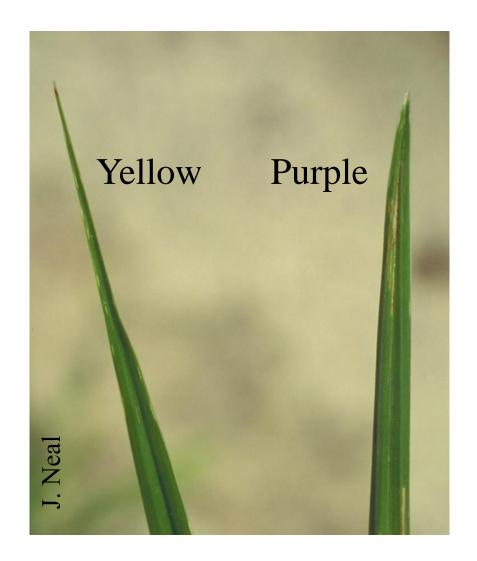
- Each herbicide has limitations
 - Crop safety can be dependent on timing of herbicide application
 - Preharvest interval limitation
- Important to begin with healthy strawberry plants to maintain good weed control

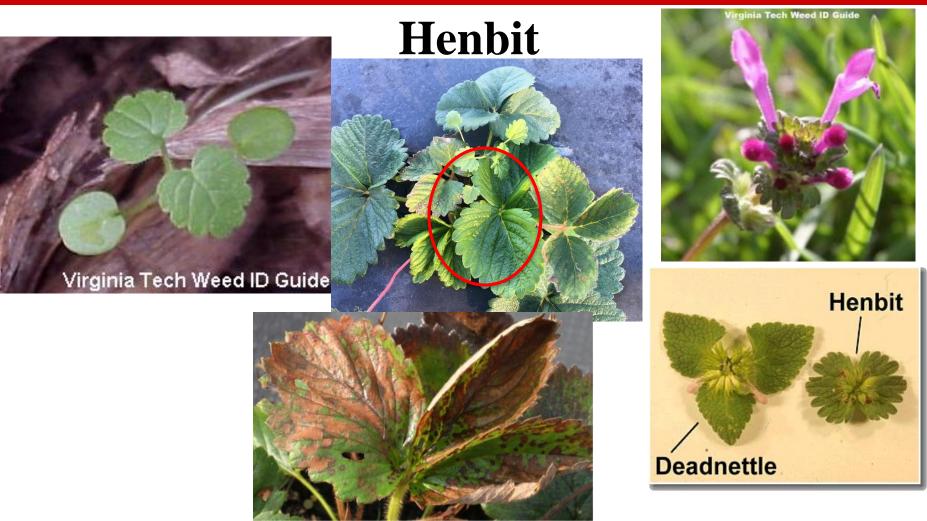
Recommended Program for Weed Control in the Bed

- PRE herbicide applied to pre-formed bed prior to laying plastic mulch.
- Stinger POST if necessary and appropriate (only POST herbicide available for broadleaf weeds in the bed).
- Grass herbicide if necessary.
- Hand removal.
- Paraquat, Aim POST for row middles.

Yellow vs. Purple Nutsedge – Leaf tips

- 1. Spartan preplant 4 to 8 oz/A.
- 2. Better on yellow than purple.





- 1. Chateau 3 oz/A applied to preformed bed prior to laying plastic.
- 2. Spartan 4 to 8 oz/A applied to preformed bed prior to laying plastic.
- 3. Goal 1 pt/A applied to preformed bed prior to laying plastic.
- 4. No postemergence options available.

Common and mousear chickweed



- 1. Chateau 3 oz/A applied to preformed bed prior to laying plastic.
- 2. Spartan 4 oz/a applied to preformed bed prior to laying plastic.
- 2. Devrinol 8 lb/A applied to preformed bed prior to laying plastic.
- 3. No postemergence options available.

Carolina geranium



- 1. Goal 1 pt/A applied to preformed bed prior to laying plastic.
- 2. Spartan at 4 to 8 oz/A applied to preformed bed prior to laying plastic (depends on soil type).
- 3. No postemergence options available.

Vetch





- Stinger POST at 0.3 to 0.5 pt/A (30 day PHI). (State label – must sign a waiver of liability).
- 2. Stinger will impact rotational crops.



Cutleaf evening primrose



Herbicide Options:

1. Goal 1 pt/A applied to preformed bed prior to laying plastic will provide partial control.

- 2. Chateau 3 oz/A applied to preformed bed prior to laying plastic.
- 3. No postemergence options available.

Curly dock







- 1. Goal 1 pt/A applied to preformed bed.
- 2. Chateau and Devrinol will not control.
- 3. Stinger 0.3 to 0.67 pt/A applied postemergence to small dock.



Corn spurry





Herbicide Options:

1. Goal 1 pt/A applied to preformed bed prior to laying plastic will provide partial control.

- 2. Chateau or Spartan applied to preformed bed prior to laying plastic.
- 3. No postemergence options available.

Row Middle Weed Management

Curly dock



Henbit





Several Options for Row Middles

- <u>Mowing</u>
- Herbicide options
 - Preemergence
 - Chateau
 - Dacthal
 - Devrinol
 - Prowl H2O henbit
 - Postemergence
 - Poast
 - Select/Select Max
 - Stinger
 - Ultra Blazer
 - Gramoxone
 - Glyphosate formulations
 - Aim

Things to Remember (Resources)

- Southern Region Small Fruit Consortium

 http://www.smallfruits.org/SmallFruitsRegGuide/index.htm
- NCSU Horticultural Science Weed Management
 - Wolfpackweeds.com
- Virginia Tech Weed ID
 - http://www.ppws.vt.edu/weedindex.htm
- CDMS for pesticide labels
 - <u>http://www.cdms.net/LabelsMsds/LMDefault.aspx?t</u>
- NCSU Plant Disease and Insect Clinic
 - http://www.cals.ncsu.edu/plantpath/extension/clinic
- MyIPM App

Questions?

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