Weed Identification and Control Options

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Beale’s Study

- Buried seed of 20 species.
- Extracted seed at various time intervals and checked germination.
Beale’s Study
40 Years Later Some of the Following Seed Still Viable

- Curly dock
- Evening primrose
- Black mustard
- Virginia pepperweed
- Broadleaf plantain
- Common purslane
- Redroot pigweed
Weed Identification

- To identify a weed it is necessary to understand “key” features of a weed and their differences between species.
- Use of a hand lens for small seedlings is important as seedling ID can be important.
- Accurate weed ID is crucial for implementation of a weed control method.
Life Cycle of Weeds

- Annual
- Biennial
- Perennial
Winter Annual Weeds
Completes life cycle in one year

- Germinate in the fall, overwinter as small plants, flower and produce seed in the spring and die in late spring as temperatures rise.
  - Henbit, deadnettle, chickweed, geranium, yellow rocket, mustards
Biennial Weeds
Requires two growing seasons to complete life cycle

- Seed germinate in the spring, summer or fall of the first year and a rosette is formed. Plants overwinter as a rosette with a thick storage root.
- After vernalization (exposure to cold) the plants flower and produce seed in the second year.
  - Cutleaf evening primrose
Perennial Weeds

- Produce vegetative structures that allow them to live for more than two years without having to produce seeds.
  - **Simple perennial** – overwinters by means of a vegetative root but primarily reproduces by seed; does not spread by means of a vegetative structure.
    - Curly dock
  - **Creeping perennial** – can overwinter and produce new plants by vegetative structures. Most can reproduce by seed also.
    - Common bermuda, yellow and purple nutsedge
Winter Annual Weeds
Completes life cycle in one year
Henbit

Herbicide Options:
1. Chateau 3 oz/A applied to preformed bed prior to laying plastic.
2. Goal 1 pt/A applied to preformed bed prior to laying plastic.
3. No postemergence options available.
Common and mouseear chickweed

Herbicide Options:
1. Chateau 3 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.
Herbicide Options:
1. Goal at 1 pt/A applied to preformed bed prior to laying plastic.
2. No postemergence options available.
Vetch

Herbicide Options:
1. Stinger POST at 0.3 to 0.5 pt/A.
Wild radish

Herbicide Options:
1. Goal at 1 pt/A applied to preformed bed prior to laying plastic (wild mustard).
2. Chateau at 3 oz/A applied to preformed bed prior to laying plastic.
3. No postemergence options available.
Biennial Weeds
Requires two growing season to complete life cycle

- Seed germinate in the spring, summer or fall of the first year and a rosette is formed. Plants overwinter as a rosette with a thick storage root.
- After vernalization (exposure to cold) the plants flower and produce seed in the second year.
Cutleaf evening primrose

Herbicide Options:
1. Goal at 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.
Perennial Weeds

- Produce vegetative structures that allow them to live for more than two years without having to produce seeds.
  - **Simple perennial** – overwinters by means of a vegetative root but primarily reproduces by seed; does not spread by means of a vegetative structure.
  - **Creeping perennial** – can overwinter and produce new plants by vegetative structures. Most can reproduce by seed also.
Curly dock

Herbicide Options:
1. Goal at 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
White clover

Herbicide Options:
1. Chateau and Devrinol will not control.
2. Goal has some activity.
3. Stinger 0.3 to 0.67 pt/A applied postemergence.
Buckhorn plantain

Herbicide Options:
1. Chateau, Goal, and Devrinol will not control.
2. Stinger 0.3 to 0.67 pt/A applied postemergence will suppress.
Yellow vs. Purple – Leaf tips

Yellow nutsedge leaf tips taper to a long, narrow point.

Purple nutsedge leaf tips are pointed but not tapered.
Yellow vs. Purple -- Flowers

Purple Nutsedge
Purple or reddish brown turning black

Yellow Nutsedge
Yellow fading to tan
Weed Response to Preemergence Herbicides in Strawberry

<table>
<thead>
<tr>
<th></th>
<th>Yellow Nutsedge</th>
<th>Carolina Geranium</th>
<th>Cut. Evening Primrose</th>
<th>Vetch</th>
<th>Henbit</th>
<th>Curly Dock</th>
<th>Chick</th>
<th>Annual Grasses</th>
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Key: N = no control, F= fair, G = good, E = excellent, --- = no data available.

*Data is limited but activity is probably similar to activity from Goal.
# Weed Response to Postemergence Herbicides in Strawberry

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Yellow Nutsedge</th>
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Questions?