Herbicide Programs to Control Problem Weeds in Blueberries

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WSU NWREC
Blueberry Herbicide Trial
2017-18
Blueberry Herbicide Trial

• Testing of eight different herbicide programs
• Each program consisted of three applications: **dormant** (late March), **post-bloom** (early June), and **fall** (late September)
• Herbicide programs were evaluated for crop safety and weed control during the course of the season
Cultivars and Locations

• ‘Duke’ and ‘Draper’ in Lynden
  – Craig Ford, cooperator

• ‘Reka’ in Burlington
  – Richard Sakuma, cooperator

• ‘Draper’ and ‘Elliott’ in Eltopia
  – Alan Schreiber, cooperator
Herbicide Programs

1. (Alion + Treevix) fb
   (Stinger + Gramoxone) fb
   (Sandea + Aim)

2. (Chateau + Treevix) fb
   (Stinger + Gramoxone) fb
   (Matrix + Aim)

3. (Karmex + Sandea + Treevix) fb
   (Stinger + Gramoxone) fb
   (Callisto + Aim)

4. (Karmex + Matrix + Treevix) fb
   (Stinger + Gramoxone) fb
   (Callisto + Aim)
Herbicide Programs

5. (Linex + Aim) fb
   (Callisto + Gramoxone) fb
   (Sandea + Treevix)

6. (Sinbar + Aim) fb
   (Callisto + Gramoxone) fb
   (Matrix + Treevix)

7. (Casoron + Aim) fb
   (Callisto + Gramoxone) fb
   (Sandea + Treevix)

8. Zeus Prime fb
   (Callisto + Gramoxone) fb
   (Matrix + Treevix)
Weed Control

- Control was excellent for all treatments in ‘Duke’, both ‘Draper’ trials, and ‘Elliott’ through the 2017 season
  - Control not as good at the Eltopia site in 2018 (75 to 89% control)
  - Near 100% control at the Lynden site
- ‘Reka’ plots contained fairly extensive infestations of yellow nutsedge and wild buckwheat
General Weed Control
Eltopia Trials, June

%  

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Yellow Nutsedge Cover
‘Reka’ Trial, October

%
Yellow Nutsedge Cover
‘Reka’ Trial, October

%
Yellow Nutsedge Cover
‘Reka’ Trial, October

% NS

2017 2018

1 2 3 4 5 6 7 8
Wild Buckwheat Cover
‘Reka’ Trial, October

%
Wild Buckwheat Cover
‘Reka’ Trial, October

%
Fifty-berry Weight
2-year Average

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Conclusions

• No program was injurious to blueberry
  – Yield and fruit size similar among programs

• No major difference in performance between central and western Washington

• Two consecutive seasons of Alion treatment did not cause problems

• Perhaps some control of wild buckwheat with Program 6 (Sinbar + Aim, Callisto + Gramoxone, Matrix + Treevix)
Yellow Nutsedge Trial

- Testing of several herbicides for control of yellow nutsedge
  - Richard Sakuma, cooperator
  - ‘Reka’ blueberry
- PRE products include Casoron, Dual Magnum, and Outlook (February 16)
- Stand-alone or sequential applications with Sandea applied POST (May 30)
- Programs were evaluated for yellow nutsedge control during the course of the season
Yellow Nutsedge Cover
Second Trial, ‘Reka’

%
Conclusions

• No program was injurious to blueberry
• Some *early suppression* of yellow nutsedge with PRE herbicides
• Treatment with Sandea in late May *suppressed yellow nutsedge* growth significantly
• By October, however, *yellow nutsedge* had recovered
• Two applications warranted? May (*post-flowering*) and again in September (*post-harvest*)?