WSU Cranberry
summer field day 2014
Announcements

• Tipworm
  • Monitoring
  • Insecticide screening for efficacy
    • Short term
    • Long term

• Weevil
  • New control tools
    • New and future pesticides

• Fireworm
  • Best use of current control tools
  • New control tools

• Weeds
WSU weather station coming on-line in Grayland within the month.

- Weather alert
- Temperature alert (email or txt or phone)
- and much more.
- We have placed 12 reference sensors across Grayland to help gauge relative temperature compared to the weather station.
Your FSA needs you!

**What are FSA County Committees?** - Farm Service Agency County Committees are a group of 3-5 locally elected farmers who represent their communities on decisions related to federal farm programs. Committee members are paid for their time.

**Why are FSA County Committees important to farmers?** – Committees rule on farmer appeals of Farm Service Agency decisions. If we deny benefits to a farmer, he/she can appeal to the county committee. Some disaster relief programs are offered only when a county committee makes a request for program availability. For example, FSA has paid a portion of the cost to replace fences lost during floods and wildfires. Committees make decisions that impact the payment rates made for some FSA programs. For example, the cost-share rates for inputs are based on information provided by committees.

**Who is eligible to seek nomination?** – Farmers/ranchers who farm in the local administrative area (LAA) open for election and who have farm records with the Farm Service Agency.
Link to map showing the local administrative area open for elections. LAA #3, most of Pacific County.
Does Tipworm affect yield?

Hatton’s farm 2014- Grayland

<table>
<thead>
<tr>
<th>Variety</th>
<th>No tipworm</th>
<th>Heavy tipworm</th>
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<tbody>
<tr>
<td></td>
<td>% fruiting upright</td>
<td></td>
</tr>
<tr>
<td>Hyred</td>
<td>36</td>
<td>27</td>
</tr>
<tr>
<td>Stevens</td>
<td>38</td>
<td>11</td>
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Adult Tipworm in emergence traps (#/week)
all sites Long beach and Grayland

<table>
<thead>
<tr>
<th>Date</th>
<th># adults per trap</th>
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<tbody>
<tr>
<td>4/21/14</td>
<td>0</td>
</tr>
<tr>
<td>5/5/14</td>
<td>2</td>
</tr>
<tr>
<td>5/19/14</td>
<td>4</td>
</tr>
<tr>
<td>6/2/14</td>
<td>6</td>
</tr>
<tr>
<td>6/16/14</td>
<td>8</td>
</tr>
<tr>
<td>6/30/14</td>
<td>10</td>
</tr>
<tr>
<td>7/14/14</td>
<td>12</td>
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</table>

Graph showing the number of adult Tipworms per trap from 4/21/14 to 7/14/14.
Insecticide screening for tipworm

Treated May 16 & 27, assessed 6/3 & 6/17

Total Number of Tipworm Larvae /25 tips

- control
- Cpd B 2x
- Altacor 2x
- Sevin 2x
- Pyganic 2x
- Cpd C 1x

- farm 1
- farm 2

Study 4 sites S and W
Insecticide screening for tipworm

Treated May 16 & 27, assessed 6/3 & 6/17
Total Number of Larvae + pupae /25 tips

Study 4 sites S and W
Insecticide screening for tipworm

Treated May 16 & 27, assessed 7/16/14

% upright with terminal bud

Study 4 sites S and W

- control
- Cpd B 2x
- Sevin 2x

farm 1
farm 2
Insecticide screening for tipworm

Treated May 16 & 27, assessed 7/16/14

% upright with cupped tips

Study 4 sites S and W

- **control**
- **Cpd B 2x**
- **Sevin 2x**

- **farm 1**
- **farm 2**
Insecticide screening for tipworm

Treated May 16 & 27, assessed 6/3 & 6/17

Number of Tipworm Larvae + pupae /25 tips

Study 4 Site W
Insecticide screening for tipworm

Farms treated twice 7 days apart and assessed 7 DAT

Number of Larvae/25 tips

Study 5, sites G, K & H
Farms treated twice 7 days apart and assessed 7 DAT

Number of Larvae + Pupae /25 tips

Farm 1 & 3 treated 5/27 & 6/3
Farm 2 treated 6/3 and 6/10
Timing is critical even if you have the right chemistry

Applied at right time (May 16 and 27th)
- 17-Jun
- 3-Jun

Applied too late (June 10 & 17th)

Insecticide screening for tipworm
Monitoring data – what does it mean and so what?

- Calendar date- not site specific enough
- Data on adults and may not correspond to best treatment time
- Tip assessment for larvae – too difficult
- Tip curling too late
BC monitoring system
Collection 100 uprights and look for eggs, larvae, pupae
Modified monitoring system

- Frequently monitor the warm edges of the bed starting early May for the first curled twisted leaves.
- This is likely going to be halfway to 2/3rd through May.
- Treat immediately thereafter, 10 days before the rest of the uprights are infested.
- Treat again in 7-10 days, but before the bees arrive.
Recommendation

• 2014
  • It is too late to spray anything
  • Monitor and assessment the need for treatment in 2015
  • Map hot spots for early monitoring in 2015 to determine spray timing
  • Buy Sevin in your spray order (for up to 3 application/ac)

• 2015
  • Monitor edges and hot spots for very first tip curling
  • Spray immediately with Sevin, repeat in 7 days (broadcast is better than chemigation)
  • Make sure you last spray is 2 days before bees arrive
  • Apply Altacor during bloom for possible suppression
  • Apply Sevin after bees are removed, if needed
Which treatment timing worked best?

Altacor treatment dates

Swept July 9, 2014

2nd generation timing for Altacor vs first adult BHFW and peak flight

Moths per trap
2nd generation timing for Altacor vs first adult BHFW and peak flight

Untreated control had 28 larvae/5 sweeps

Window to obtain efficacy with Altacor was very wide (6/11 to 6/25)

Altacor treatment dates

Swept July 9, 2014
Applied 5/2 and 5/7 (Grandevo and Venerate only), sweep 5/5 and 5/15
Insecticide screening for fireworm

2nd generation BHFW control with “organic” insecticides

Applied 7/3/14, sweep 7/7/14
Weevil Protection
May

Overwintering Adults

Avaunt

Orthene

June

New Adults

Avaunt

Actara

July

Nematodes

Admire

(sand soil only)

August

MET 52

Sept.
100 lbs/ac MET52

Dissolve rice granules in water w/ 0.05% Silwet surfactant

Let set 1 hour, filter and spray, and wash-in in with at least an inch/ac

0 day PHI, Tolerance exempt for cranberry in US;

Expensive - $1800/ac
Blackvine weevil larvae control on Grayland farm treated with MET52 – Winter 2014

MET52 works – but @ $1800/ac – not well enough
Insecticide screening for weevil

# adult BVW / 20 sweeps

A new chemistry that works great on Tipworm and Weevil

Applied @ night on 7/1, sweep 7/8
Weed Control

- Quinstar – export restrictions
- No new herbicides
- No Princep allowed
- Casoron or 2,4-D for control of overgrowth
What is the best clean up spray for a backpack?

Callisto or Callisto + Volunteer?

What rate per backpack: 0.5, 1.0 or 1.5 oz/gal?

Depends on the weed:
For some weeds there was an advantage using Volunteer

For some weeds 1.5 oz/gal was better than 1 or 0.5 oz/gal. For other there there was no differences.
What is the best clean up spray for a backpack?

% control St. Johns Wort

- Callisto+li700
- Callisto+Volunteer+li700
What is the best clean up spray for a backpack?

% control Cutgrass

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<th>0.5 oz/gal</th>
<th>1 oz/gal</th>
<th>1.5 oz/gal</th>
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<tbody>
<tr>
<td>Callisto+li700</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Callisto+Volunteer+li700</td>
<td>100</td>
<td>100</td>
<td>100</td>
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What is the best clean up spray for a backpack?

% control Spike Rush

- Callisto+li700
- Callisto+Volunteer+li700

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<td></td>
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</tr>
<tr>
<td>Callisto+Volunteer+li700</td>
<td></td>
<td></td>
<td>100%</td>
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Variety trials

- **New Release**
  - Rutgers 1 – (CNJ99-52-15) - “Welker” now available
  - Rutgers 2 – 2015 (CNJ99-9-96) to be released in 2015

- **Recent releases with comments**
  - Crimson Queen (Several good looking beds in 2014, mix of strong and not so strong beds, issues with late harvest)
  - Willapa Red (looks very good)
  - Demoranville (best looking of all new releases on the west coast)
  - Hyred (looks good, not for late harvest)
  - BG’s (looks very good, large fruit)
  - Gryleski 1 (good solid variety, with nice fruit quality)
Questions