Managing Codling Moth with Success, Intrepid and Assail

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Insecticide Chemistries

Three chemistries currently registered for use on apple in WA State

- Success – Dow AgroSciences
- Intrepid – Dow AgroSciences
- Assail – Cerexagri, Inc.
Success (Entrust) – *spinosad*

- Registered on apple in 1998
- Limited use against CM
  - More effective alternatives available
  - Conserve for LR control
- Organic formulation
Success – Handgun Trial

Avg % CM Injury

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Avg % CM Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suc. + oil weekly</td>
<td>0</td>
</tr>
<tr>
<td>Suc. + oil bi-weekly</td>
<td>0</td>
</tr>
<tr>
<td>Success bi-weekly</td>
<td>10</td>
</tr>
<tr>
<td>Guthion 2 lb</td>
<td>c</td>
</tr>
<tr>
<td>Check</td>
<td>a</td>
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Success @ 8 fl oz/A

- 12 apps
- 6 applications
Success – Airblast Trial

6 applications

Avg % CM Injury

16
12
8
4
0

Success
6 fl oz
Success
8 fl oz
Guthion
2 lb
Check

6 applications

b
b
b
a

Avg % CM Injury
Intrepid – *methoxyfenozide*

- Registered on apple in 2001
- Used as supplement to MD
- 3 apps/gen at 14 day intervals
Intrepid – Handgun Trials

Avg Entries per 100 Fruit

Intrepid Lay 6 apps 16 fl oz/A
Intrepid Hatch b
Assail c
Check a

5 apps 16 fl oz/A
Intrepid Lay b
Intrepid Hatch b
Assail b
Check a
Intrepid, Assail – Airblast Trial

Avg Entries/100 Fruit

4 applications

- Intrepid 16 fl oz
- Assail 3.4 oz + oil
- Guthion 2 lb

Check

Graph showing the comparison of different treatments on average entries per 100 fruit.

- Intrepid 16 fl oz: 25 gpa (b), 100 gpa (bc)
- Assail 3.4 oz + oil: 25 gpa (c), 100 gpa (bc)
- Guthion 2 lb: 25 gpa (c), 100 gpa (c)

Check: a
Assail – acetamiprid

- Registered for use on apple in 2002
- Most recent CM tool to be registered
- 80-90% reduction in CM injury
Assail – Handgun Trial

Avg % CM injury

4 applications

Assail 1.2 oz
Assail 3.4 oz
Assail 3.4 oz+oil
Guthion 3 lb
Check

a

b
c
c
d
Programs in Commercial Orchard

Program 1
Two Intrepid (spr LR)
Four Assail + oil (CM)
Two Success (sum LR)

Program 2
Two Success (spr LR)
Two Assail + oil (1st CM)
Two Intrepid (2nd CM)

Program 3
Two Success (spr LR)
Four Assail + oil (CM)
Conclusions

- We can manage codling moth with new insecticide chemistries
- Basic management becomes more important
  - Monitoring and trapping to optimize application timing
  - Using correct water volume to achieve good coverage
  - Using rates that are appropriate to the targeted pest