Aphid Contamination on Head Lettuce

Harvest Evaluation - Mar 6, 2003

Mean aphids / plant

- Admire 16 oz
- Assail
- Assail Capture
- Actara
- Actara Capture
- Fulfill
- Fulfill Capture
- Flonicamid
- Check

All aphid species

0 10 20 30 40 50 60 200 300 400 500
Aphid Contamination on Head Lettuce
Harvest Evaluation - Mar 6, 2003

![Bar chart showing mean aphids per plant for various treatments](chart.png)

- Admire 16 oz
- Assail
- Assail Capture
- Actara
- Actara Capture
- Fulfill
- Fulfill Capture
- Fonicamid
- Check

The chart compares the mean number of foxglove aphids for different treatments. The treatments are ranked based on the mean aphid counts, with 'a' being the highest and 'c' being the lowest. The chart indicates the contamination level on head lettuce for each treatment.
Aphid Contamination on Head Lettuce
Harvest Evaluation - Mar 6, 2003

Mean aphids / plant

- Heads
- Wrapper/ Frame leaves

Controlled substances:
- Admire
- Assail
- Assail Capture
- Actara
- Actara Capture
- Fulfill
- Fulfill Capture
- Flonicamid
- Check
Aphid Contamination on Head Lettuce
Harvest Evaluation - Mar 6, 2003

Mean aphids / plant

A. lactucae / Potato aphid

>98% Control

Admire 16 oz Assail Assail Capture Actara Actara Capture Fulfill Fulfill Capture Flonicamid Check

b b b b a
## Aphid Efficacy in Romaine

<table>
<thead>
<tr>
<th>Spray # 1 (Mar 13)</th>
<th>Spray # 2 (Mar 21)</th>
<th>Spray # 3 (Mar 30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethoate + endosulfan</td>
<td>0.75 pt + 1 qt</td>
<td>Dimethoate + endosulfan</td>
</tr>
<tr>
<td>endosulfan</td>
<td>3.75 oz + 1 qt</td>
<td>Provado + endosulfan</td>
</tr>
<tr>
<td>Flonicamid + endosulfan</td>
<td>4 oz + 1 qt</td>
<td>Flonicamid + endosulfan</td>
</tr>
<tr>
<td>Assail + endosulfan</td>
<td>1.7 oz + 1 qt</td>
<td>Assail + endosulfan</td>
</tr>
<tr>
<td>Fulfill + endosulfan</td>
<td>2.75 oz + 1 qt</td>
<td>Fulfill + endosulfan</td>
</tr>
</tbody>
</table>
Romaine Aphid Efficacy

1st application (Mar 13)

* 33.5 aphids/plant
* 100% infestation

* Degree of efficacy varied by species
Aphid Efficacy in Romaine
YAC-2003

Foxglove Aphid

Mean Aphid / Plant

0  20  40  60  80  100

Pre-spray  7 DAT  7 DAT  5 DAT  10 DAT

+Mustang +Capture +Endosulfan

Endosulfan Provado Untreated

Fulfill Actara Assail Dimethoate Flonicamid

0  20  40  60  80  100
Aphid Efficacy in Romaine
YAC-2003

Potato Aphid / A. lactucae

Mean Aphid / Plant

- Mustang
- Capture
- Endosulfan
- Untreated
- Provado
- Actara Dimethoate

Pre-spray 7 DAT 7 DAT 5 DAT 10 DAT
Aphid Efficacy in Romaine
YAC- 2003

Lettuce Aphid

Mean Aphid / Plant

0 50 100 150 200 750 800 850

Pre-spray 7 DAT 7 DAT 5 DAT 10 DAT

Mustang Capture Endosulfan Untreated

Fulfill Assail Provado Fusicamid

Dimethoate Actara
Interactions between Aphid and Thrips Control in Head Lettuce

Threshold:

1st colonization = 0.9 aphids /plant

7 % of plants infested > 1 aphid
Interactions between Aphid and Thrips Control in Head Lettuce

![Graph showing interactions between aphid and thrips control in head lettuce. The graph compares different control methods: Admire, Reduced-risk, Conventional, and Untreated. The mean aphids per plant are plotted on the y-axis, ranging from 0 to 400. The x-axis lists the control methods. The graph uses different colors to indicate statistical significance, with letters (e.g., a, b, c, d, e, f) to denote comparisons.]
Interactions between Aphid and Thrips
Control in Head Lettuce

Mean Aphids / Plant

Heads
Frame leaves

Lannate
Success
Admire
New Chemistry
Conventional
Untreated

Foxglove aphid
Arizona Crop Information Site

http://www.ag.arizona.edu/crops