ORNAMENTALS

Treatment lb ai/100 gal Mean no. alive*

Knoxout 2 FM 1.38 190.0 b
Knoxout 2 FM 0.79 127.1 b
Diazinon AG500 0.79 5.3 a
Diazinon AG500 0.39 19.4 a
Orthene 75 SP 1.00 0.0 a
Check, water 335.0 c

*Mean separation by DMRT P ≤ 0.05.

CHRYSANTHEMUM 'GOLDBURST MFSO'
Green Peach Aphid; Myzus persicae (Sulzer)
John W. Neal, Jr., and Gale E. Drake (313)

GREEN PEACH APHID CONTROL ON CHRYSANTHEMUM, 1978: Greenhouse grown chrysanthemums, 8 to 12 weeks old and heavily infested with green peach aphids were selected. Plants were divided into 7 groups of 9 plants per treatment. Spray solutions prepared from formulated materials in water were applied to run-off with a Hudson Climax sprayer. Check plants were sprayed with water from a Hudson sprayer with no history of chemical use. On days 5 and 6 post-treatment, 6 lower leaves were removed from each test plant and examined with a stereo-microscope for the number of live aphids.

All chemical treatments significantly reduced the number of green peach aphids on the leaves examined. Excellent control was obtained with Curacron and Orthene at both rates.

Treatment and lb ai/100 gal spray Mean no. alive*

Curacron 6E 1.0 0.0 a
Curacron 6E 0.50 0.0 a
Lannate 90 WP 0.50 3.5 a
Lannate 90 WP 0.25 4.7 a
Orthene 75 SP 0.50 0.2 a
Orthene 75 SP 0.25 0.3 a
Check, water 90.4 b

*Mean separation by DMRT; P ≤ 0.05.

CHRYSANTHEMUM: Chrysanthemum morifolium
POLKA-DOT PLANT: Hypoestes phyllostachya
Ronald D. Oetting (314)

GREEN PEACH APHID CONTROL IN THE GREENHOUSE, GEORGIA, 1979: Six insecticides were evaluated for efficacy in controlling aphids on ornamental plants. Foliar sprays were applied to the point of run-off on chrysanthemum and polka-dot plants grown in Metro Mix 300 in 115 mm sq pots maintained on raised greenhouse benches. Treatment plots were single plants replicated 4 (chrysanthemums) and 6 (polka-dot) times. Treatments were applied Feb 27'79 at a temperature of 25 C on polka-dot plants and Feb 16'79 at 27 C on chrysanthemums with a hand CO2 sprayer at 30 psi utilizing a 8003 nozzle. Efficacy was evaluated by counting the aphids on the lower surface of 1 leaf/chrysanthemum plant or 2 leaves/polka-dot plant. Chrysanthemum plants were sprayed with benomyl for powdery mildew control on Feb 27.

No phytotoxicity resulted from the application of any of the test compounds. In both tests Pirimor, Vydate, and Orthene treatments resulted in 100% mortality in 3 days. Also Pydrin and Pramex gave excellent control. Resmethrin treatments did not reduce aphid populations significantly from the check. However, the rate was lower than recommended.

Mean number of aphids/leaf

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Chrysanthemums</th>
<th>Polka-dot Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pretreat</td>
<td>3 day</td>
</tr>
<tr>
<td>Pirimor 50W 0.188 lb</td>
<td>36.3</td>
<td>o a*</td>
</tr>
<tr>
<td>Vydate 2E 0.25 lb</td>
<td>37.3</td>
<td>0 a</td>
</tr>
<tr>
<td>Orthene 75S 0.5 lb</td>
<td>101.3</td>
<td>0 a</td>
</tr>
<tr>
<td>Pydrin 2E 0.1 lb</td>
<td>68.8</td>
<td>5.3 a</td>
</tr>
<tr>
<td>Pramex 1E 0.1 lb</td>
<td>46.0</td>
<td>3.0 a</td>
</tr>
<tr>
<td>Resmethrin 2E 0.125 lb</td>
<td>33.0</td>
<td>12.0 ab</td>
</tr>
<tr>
<td>Check</td>
<td>61.3</td>
<td>22.8 b</td>
</tr>
</tbody>
</table>

*Means in columns followed by the same letter are not significantly different at the 5% level using Duncan's Multiple Range Test.