Mauget Imicide® Micro-infusion Provides Significant Control Compared to Neonicotiniod Drench

Research Facility & Trial Location
A study done by the University of Hawaii at Manoa evaluated the chemical control of Erythrina Gall Wasp (EGW) using systemic drench or micro-infusion application methods in wiliwili trees in Hawaii.

Objectives
The objective of the study was to determine the ability of several insecticides using soil drench or trunk micro-infusion application as a control strategy for EGW.

Materials & Methods
In early August 2005, 20-30 foot, 5-12 inch diameter wiliwili trees were assigned to four treatment groups: untreated (water drench), Mauget Imicide (10% imidacloprid) micro-infusion, Merit 2 F (imidacloprid) drench, or Safara 20 SG (dinotefuran) drench. Galls were sampled periodically for four months after treatment. Emerged wasps were quantified after emergence from samples ceased.
Findings

Significant Control with Imicide
Gall tissue taken from trees treated with Imicide exhibited significantly lower numbers of emerged wasps at all sampling periods, while other treatments were similar to the control (Figure 1). Researchers observed significant effectiveness with Imicide within four weeks after treatment, with control continuing for at least four months.

Conclusions
In this trial, micro-infusion of Mauget Imicide was the only effective treatment in the control of Erythrina Gall Wasp.

Figure 1
Emerged Wasp per Gram of Gall Tissue

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 2.5</th>
<th>Month 3</th>
<th>Month 3.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untreated</td>
<td>55.4\textsuperscript{a}</td>
<td>64.4\textsuperscript{a}</td>
<td>48.2\textsuperscript{a}</td>
<td>21.9\textsuperscript{a}</td>
<td>17.3\textsuperscript{a}</td>
</tr>
<tr>
<td>Imicide (injection)</td>
<td>1.9\textsuperscript{b}</td>
<td>12.7\textsuperscript{b}</td>
<td>15.8\textsuperscript{b}</td>
<td>2.6\textsuperscript{b}</td>
<td>1.1\textsuperscript{b}</td>
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<tr>
<td>Merit (drench)</td>
<td>65.1\textsuperscript{a}</td>
<td>52.5\textsuperscript{a}</td>
<td>45.8\textsuperscript{a}</td>
<td>21.8\textsuperscript{a}</td>
<td>9.4\textsuperscript{a}</td>
</tr>
<tr>
<td>Safari (drench)</td>
<td>48.7\textsuperscript{a}</td>
<td>52.1\textsuperscript{a}</td>
<td>35.4\textsuperscript{a}</td>
<td>21.7\textsuperscript{a}</td>
<td>24.3\textsuperscript{a}</td>
</tr>
</tbody>
</table>

\textsuperscript{a,b} Numbers in same column with different letters differ significantly.

For more information or the full report of this study, call 800-TREES-Rx (800-873-3779) or visit www.mauget.com.