PECAN WEEVIL CONTROL IN PECANS, SPARKS, OK, 1998: Three insecticides were evaluated for control of pecan weevil (PW) on 'Mohawk' cultivar of pecan. Trials were conducted at the Pecan Research Station located near Sparks, OK (Lincoln Co.) and were arranged in a RCB design with four single-tree replications. Timing of application was based on monitoring PW emergence from the soil using one pyramid trap per tree on three trees per treatment. The trunk of each tree used in trapping/monitoring was painted white to enhance trap capture and accuracy. Treatment areas and traps were set out on 5 Aug and monitored every other day throughout the production season. When trap captures approached 0.4 weevils per trap per day, chemical treatment was initiated. Based on these criteria, two applications of each insecticide were made on 16 and 24 Sep. For the first application, no surfactant or buffer was used. During the second application, 1 pt per 100 gal of Surfking +, surfactant/buffer was used. Treatments were applied using a PTO driven, air blast orchard sprayer calibrated to deliver 97 gpa. PW populations did not reach threshold levels after the second application. Damage was evaluated at harvest (November) using two, 20-nut subsamples per tree on 4 single trees per treatment. Each nut was cracked by hand and examined for presence of weevils. Percentage infestations were calculated for each tree, then data were analyzed using general linear models procedures (GLM) with mean separation by DMRT.

PW infestation in the untreated trees was 4.4%, indicating insufficient weevil population for testing insecticides reliably. None of the chemical treatments reduced PW infestation significantly below that in untreated pecan.

<table>
<thead>
<tr>
<th>Treatment/formulationa</th>
<th>Rate</th>
<th>% Infestation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imidan 70WSB</td>
<td>0.70 lb (Al)</td>
<td>8.1a</td>
</tr>
<tr>
<td>Imidan 70WSB</td>
<td>1.40 lb (Al)</td>
<td>8.1a</td>
</tr>
<tr>
<td>Sevin 80S</td>
<td>2.00 lb (Al)</td>
<td>0.6a</td>
</tr>
<tr>
<td>Naturalis-L</td>
<td>1.03 x 10^b</td>
<td>5.0a</td>
</tr>
<tr>
<td>Untreated check</td>
<td>—</td>
<td>4.4a</td>
</tr>
</tbody>
</table>

Means followed by the same letter are not significantly different (DMRT; P = 0.05).

aFirst application, 16 Aug no surfactant or buffer. Second application 24 Sep used 1 pt/100 gal of Surfking + surfactant/buffer on every treatment.
bNumber of conidia/acre in 15 oz of actual material.