SOYBEAN: *Glycine max*

**Efficacy of Selected Insecticides for Control of Foliation-Feeding Lepidopteran Pests in Soybeans, 2011**

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Soybean looper: *Chrysodeixis (Pseudoplusia) includens*  
Velvetbean caterpillar: *Anticarsia gemmatalis*  
Green cloverworm: *Hypena scabra*

On 31 August 2011, a foliar insecticide trial was initiated in Brooksville, Mississippi. Soybean plants were at approximately R4 stage of maturity. Statistical design was arranged in a randomized complete block with four replications. Plot size was 4 rows by 40 ft long on 38 inch centers. Seven insecticides were evaluated against the untreated check (UTC) for control of soybean looper (SBL), velvetbean caterpillar (VBC), and green cloverworm (GCW). Insecticides were applied with a tractor-mounted sprayer calibrated to deliver 10.0 gpa at 60 psi through TX-6 Hollow Cone nozzles (2 per row). Insecticides were applied on 31 August. There are two sample dates following the application of treatments: 2 days after treatment (2 DAT) and 6 day after treatment (6 DAT). Plots were sampled by taking 25 sweeps per plot with a sweep net on each sampled date and recording the number of soybean looper, velvetbean caterpillar, and green cloverworm larvae per 25-sweep sample. Data was analyzed with ANOVA and means were separated using Fisher’s Protected LSD ($P \leq 0.05$).
Analysis indicates that all treatments had significantly fewer soybean looper larvae, but were not significantly different from each other, compared to the UTC and Orthene 97 at 2 DAT. All treatments significantly lowered the number of velvetbean caterpillar and green cloverworm larvae compared to the UTC but did not statistically differ from one another. At 6 DAT, all treatments had significantly fewer soybean loopers compared to the UTC, except Orthene 97; Leverage 360 wasn’t statistically different from the UTC or other insecticide treatments. All insecticides had significantly less velvetbean caterpillar larvae compared to the UTC but were not statistically different from each other at 6 DAT. There was no differentiation among treatments and the UTC for control of green cloverworm at 6 DAT.

Table 1.

<table>
<thead>
<tr>
<th>Hybrid</th>
<th>Al/Acre</th>
<th>SBL</th>
<th>VBC</th>
<th>GCW</th>
<th>SBL</th>
<th>VBC</th>
<th>GCW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endigo 2.06</td>
<td>0.064</td>
<td>5.3bc</td>
<td>0.3b</td>
<td>0.0b</td>
<td>1.3b</td>
<td>0.3b</td>
<td>0.5a</td>
</tr>
<tr>
<td>Leverage 360</td>
<td>0.066</td>
<td>5.0bc</td>
<td>0.3b</td>
<td>0.0b</td>
<td>1.3ab</td>
<td>0.5b</td>
<td>0.0a</td>
</tr>
<tr>
<td>Belt 4 SC</td>
<td>0.031</td>
<td>1.3c</td>
<td>0.8b</td>
<td>0.3b</td>
<td>0.8b</td>
<td>0.3b</td>
<td>0.0a</td>
</tr>
<tr>
<td>Belt 4 SC</td>
<td>0.063</td>
<td>0.3c</td>
<td>1.8b</td>
<td>0.3b</td>
<td>0.3b</td>
<td>0.0b</td>
<td>0.0a</td>
</tr>
<tr>
<td>Besiege</td>
<td>0.049</td>
<td>0.8c</td>
<td>0.0b</td>
<td>0.0b</td>
<td>0.0b</td>
<td>0.0b</td>
<td>0.0a</td>
</tr>
<tr>
<td>Besiege</td>
<td>0.088</td>
<td>0.5c</td>
<td>0.3b</td>
<td>0.0b</td>
<td>0.0b</td>
<td>0.0b</td>
<td>0.0a</td>
</tr>
<tr>
<td>Steward 1.25 EC</td>
<td>0.065</td>
<td>0.5c</td>
<td>5.5b</td>
<td>0.0b</td>
<td>0.5b</td>
<td>0.5b</td>
<td>0.0a</td>
</tr>
<tr>
<td>Intrepid 2 F</td>
<td>0.063</td>
<td>0.3c</td>
<td>1.0b</td>
<td>0.0b</td>
<td>0.0b</td>
<td>0.0b</td>
<td>0.0a</td>
</tr>
<tr>
<td>Orthene 97</td>
<td>0.728</td>
<td>9.8ab</td>
<td>3.0b</td>
<td>0.8b</td>
<td>3.5a</td>
<td>4.5b</td>
<td>0.0a</td>
</tr>
<tr>
<td>UTC</td>
<td>11.0a</td>
<td>106.5a</td>
<td>9.8a</td>
<td>4.0a</td>
<td>30.3a</td>
<td>0.0a</td>
<td>0.0a</td>
</tr>
</tbody>
</table>

LSD (0.05) 4.16 19.65 4.86 1.71 5.13 0.46

Means within a column sharing the same letter are not significantly different (LSD; \( P > 0.05 \)).