Scouting Sugarcane Aphids

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Timing effective treatment to control sugarcane aphids (SCA) in sorghum depends on the size of the SCA population. To estimate the number of SCA in a field, follow these steps for scouting the field and use the Sampling Protocol (below) and the Quick Aphid Checker (on back) to make treatment decisions.

**First Detection: Is the Field at Risk?**

- Once a week, walk 25 feet into the field and examine plants along 50 feet of row.  
- If honeydew is present, look for SCA on the underside of a leaf above the honeydew.  
- Inspect the underside of leaves from the upper and lower canopy from 15–20 plants per location.  
- Sample each side of the field as well as sites near Johnsonsgrass and tall mutant plants.  
- Check at least 4 locations per field for a total of 60–80 plants.

If no SCA are present, or only a few wingless/winged aphids are on upper leaves, continue once-a-week scouting.

If SCA are found on lower or mid-canopy leaves, begin twice-a-week scouting. Use the Sampling Protocol and the Quick Aphid Checker to determine if aphid densities exceed the economic threshold.

**Sampling Protocol: Making Treatment Decisions**

Examine the underside of one completely green leaf from the lower canopy and the uppermost leaf (or the leaf below the flag leaf at boot to heading) and estimate the number of SCA per leaf, using the Quick Aphid Checker. Examine 2 leaves from each of 5 random plants per location. Repeat at 4 locations, for a total of 40 leaves. Use the Quick Aphid Checker to calculate the mean number of aphids per leaf.

- If the field average SCA infestation is 50–125 aphids or more per leaf, apply an insecticide within 4 days and evaluate control after 3–4 days. Consider treatment at 50 aphids per leaf if limited to once-a-week scouting.  
- If the SCA infestation is less than the threshold level, continue scouting twice a week.
Quick Aphid Checker

Estimate the number of sugarcane aphids (SCA) per leaf to help time foliar insecticides for SCA control on sorghum. Each photo represents an estimate from the table. For example, photo A shows about 12 aphids.

<table>
<thead>
<tr>
<th>Photo</th>
<th>Range</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1–25</td>
<td>12</td>
</tr>
<tr>
<td>B</td>
<td>26–50</td>
<td>38</td>
</tr>
<tr>
<td>C</td>
<td>51–100</td>
<td>75</td>
</tr>
<tr>
<td>D</td>
<td>101–500</td>
<td>300</td>
</tr>
<tr>
<td>E</td>
<td>501–1000</td>
<td>750</td>
</tr>
<tr>
<td>F</td>
<td>&gt;1000</td>
<td>1500</td>
</tr>
</tbody>
</table>

Field Average = Total of All Estimates / Total # of Leaves Examined

Learn more about sugarcane aphids at http://txscan.blogspot.com

Photos courtesy of Travis Ahrens, Mike Brewer, and Pat Porter.

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