Insecticides Safety to Beneficials Control Interval\(^1\) Life Stages Affected

<table>
<thead>
<tr>
<th>Insecticides</th>
<th>Safety to Beneficials</th>
<th>Control Interval(^1)</th>
<th>Life Stages Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>pyriproxyfen Knack</td>
<td>Excellent</td>
<td>14-30 days</td>
<td>Eggs and mature nymphs</td>
</tr>
<tr>
<td>buprofezin Courier</td>
<td>Excellent</td>
<td>14-30 days</td>
<td>Nymphs</td>
</tr>
<tr>
<td>acetamiprid Assail, others</td>
<td>Moderate</td>
<td>14-21 days</td>
<td>All stages</td>
</tr>
<tr>
<td>flupyradifurone Sivanto</td>
<td>Good</td>
<td>7-21 days</td>
<td>All stages</td>
</tr>
<tr>
<td>dinotefuran Venom</td>
<td>Moderate</td>
<td>7-14 days</td>
<td>All stages</td>
</tr>
<tr>
<td>spiromesifin Oberon</td>
<td>Good</td>
<td>14-21 days</td>
<td>Primarily nymphs</td>
</tr>
</tbody>
</table>

\(^1\)Control interval dependent on rate, timing of application, reinestation rate and pest pressure, and beneficial insect populations.

Do not mix broad spectrum insecticides (bifenthrin) with selective insecticides (IGRs) for SLWF control unless a tank-mix is required to control multiple insect pests.

Managing Silverleaf Whiteflies in Cotton
Phillip Roberts and Mike Toews
University of Georgia

Insecticide Use:
The goal of SLWF management is to initiate control measures just prior to the period of most rapid SLWF population development. It is critically important that initial insecticide applications are well timed. If you are late with the initial application control will be very difficult and expensive in the long run. It is nearly impossible to regain control once the population reaches outbreak proportions!

- SLWF Threshold: Treat when 50 percent of sampled leaves (sample 5\(^{th}\) expanded leaf below the terminal) are infested with multiple immatures (≥5 per leaf).
- Insect Growth Regulators (Knack and Courier): use of IGRs are the backbone of SLWF management programs in cotton. Effects on SLWF populations are generally slow due to the life stages targeted by IGRs, however these products have long residual activity and perform very well when applied on a timely basis.
- Use of other insecticide options which are active on all life stages have quicker effects on SLWF infestations but lack the residual of IGRs.
- SLWF is an areawide cross commodity problem. When all parties use sound SLWF management programs all will benefit.

Following these guidelines, especially on a community basis, should result in better management of SLWF locally and areawide.

- Destroy host crops immediately after harvest; this includes vegetable and melon crops in the spring and cotton (timely defoliation and harvest) and other host crops in the fall.
- Scout cotton on a regular basis for SLWF adults and immatures.
- The presence of SLWF should influence insecticide selection and the decision to treat other pests.
- Conserve beneficial insects; do not apply insecticides for ANY pests unless thresholds are exceeded.
- Avoid use of insecticides for other pests which are prone to flare SLWF.
- Risk for SLWF problems:
  - Hairy leaf > smooth leaf cotton.
  - Late planted > early planted cotton.
  - Hot and dry > rainy conditions.
- All efforts should be made to minimize the need to treat SLWF with insecticide.

"Managing Silverleaf Whiteflies in Cotton" is a document by Phillip Roberts and Mike Toews from the University of Georgia. The image contains information on insecticides, their safety to beneficials, control intervals, and the stages of life affected. The text also includes guidelines for managing silverleaf whiteflies in cotton, emphasizing the importance of timely applications and the consideration of selective versus broad-spectrum insecticides. The document highlights the use of insecticides like pyriproxyfen, buprofezin, acetamiprid, flupyradifurone, dinotefuran, and spiromesifin, along with recommendations for broader management strategies. The conclusion stresses the need to follow these guidelines to achieve better local and areawide management of silverleaf whiteflies in cotton.