Soybean Aphid Populations in Untreated Fields

Some soybean fields without an insecticide seed treatment have been reported to have high soybean aphid rates in Northwest NY. This is most likely the first generation migrating off of Buckthorn, the overwintering host of soybean aphids. If you have untreated soybean fields, scouting for aphid colonies is critical for protecting your yield. Injury can reduce plant growth, pod number, seed weight and photosynthesis of the plant. Monitor weekly to see if populations exceed 250/plant threshold with 80 percent of plants having aphids. If natural enemies do not keep populations in check, an insecticide is warranted through the R5 growth stage. See chart below for soybean aphid insecticides available.

<table>
<thead>
<tr>
<th>Active Ingredient</th>
<th>Example Product(s)</th>
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<tbody>
<tr>
<td>acetamiprid &amp; bifenthrin</td>
<td>Argyle</td>
</tr>
<tr>
<td>acephate</td>
<td>Orthene</td>
</tr>
<tr>
<td>alpha-cypermethrin</td>
<td>Fastac</td>
</tr>
<tr>
<td>beta-cyfluthrin</td>
<td>Baythroid</td>
</tr>
<tr>
<td>dimethoate</td>
<td>Dimethoate</td>
</tr>
<tr>
<td>deltamethrin</td>
<td>Delta Gold</td>
</tr>
<tr>
<td>esfenvalerate</td>
<td>Asana XL</td>
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<tr>
<td>flupyradifurone</td>
<td>Sivanto</td>
</tr>
<tr>
<td>lamda-cyhalothrin</td>
<td>Warrior II</td>
</tr>
<tr>
<td>afidopyropen</td>
<td>Sefina Inscalis</td>
</tr>
<tr>
<td>zeta-cypermethrin &amp; bifenthrin</td>
<td>Hero</td>
</tr>
<tr>
<td>zeta-cypermethrin</td>
<td>Mustang Maxx</td>
</tr>
</tbody>
</table>

Insecticide information provided by 2022 Cornell Guide for Integrated Field Crop Management

Photos: 190 aphids on a leaflet (above) by CALS; soybean aphid damage to leaves (bottom) by NC State
Before a field of taller corn is sprayed you need to ask the question “How tall can the corn be when you spray?”. Postemergence corn herbicides have restrictions on the maximum height of corn at the time of application. Once corn reaches 12 inches tall, atrazine and premixes containing it are not an option. There is even a 30” corn height restriction for glyphosate applied to glyphosate tolerant (Roundup Ready) corn and a 24” corn height restriction for glufosinate applied to glufosinate tolerant (Liberty Link) corn. Late postemergence herbicide choices for conventional corn are somewhat limited once the corn exceeds 20 inches in height. Most, if not all, late total postemergence conventional corn herbicide programs will require more than one product in the tank mix. Correctly identifying the weeds present and measuring the heights of both the corn and weeds will be critical for control. It is not an ideal situation dealing with taller corn and weedy fields. It is difficult to control taller weeds and yield losses can be expected due to the early season competition with the corn. It is important to read and follow all label directions prior to the application of any herbicide. The figure below shows postemergence herbicides and the maximum heights for label use.

- Accent Q- 20” or V6
- Acuron Flexi- 30” or V8
- Acuron GT- 30’ or V8
- Aim- V8
- Armezon Pro- 30”or V8
- Dicamba/Clarity- 36”
- Basagran 5L- None
- Buctril/Brox- Before tassel
- Callisto- 30” or V8
- Callisto GT- 30” or V8
- Capreno- V6
- Diflexx- V10 or 36” whichever comes first
- Diflexx DUO- 36” or V7 (7th leaf collar)
- Empyros- 20” or up to V6 stage
- Empyros Triad- up to 12”
- Empyros Triad Flex- up to 12”
- Halex GT- 30” or V8
- Harmony SG- 16” or 5 collars
- Impact/Armezon-up to 45 days before harvest
- ImpactZ- up to 12”
- Impact CORE- 11”
- Harness MAX- 11”
- Hornet WDG- 20” or V6
- Laudis- V8
- Katagon- V5 or up to 20” tall, whichever is more restrictive
- Peak- 30”
- Permit- Layby (about 36” tall corn)
- Permit Plus- 6 leaf corn (5 collars)
- Realm Q- 20” or V7
- Resolve Q- 20” or before V7
- Resource- V10
- Revulin Q- 30” or V8
- Shieldex 400SC- 20” or V6 whichever comes first
- Sinate- 24” to V7, whichever comes first
- Status- 36” or V10
- Steadfast Q- 20” but before V7
- Stinger- 24”
- Yukon- 36”

This information is for educational and reference purposes only and is not a substitute for sound consultation and following product labels. Cornell Cooperative Extension is dedicated to providing research-based information to our agricultural producers. Every effort has been made to provide correct, complete, and up-to-date recommendations.