What You’ll Learn...

• More herbicides are labeled for volunteer corn control in soybean compared to corn.
• Volunteer corn can lead to yield losses in corn and soybean crops.
• Options are available to help prevent and/or control volunteer corn and to remove an existing corn stand for replanting.
• Corn rootworms can survive on volunteer corn roots.

Effects on Yield Potential
Volunteer corn generally has a minimal effect on corn yield potential, especially if management tools are employed. However, some studies have noted yield penalties with uncontrolled volunteer corn. The distribution of volunteer corn plants within an entire field should be considered when evaluating the potential for yield loss.

In addition to the potential for yield loss, volunteer corn plants left in soybean fields can allow rootworm larvae to complete their life cycle, which can result in higher rootworm populations for the next growing season. The potential increase in rootworm populations may result in significant yield loss in fields that rotate to corn the following year. Volunteer corn plants that are allowed to produce silks can also attract adult female rootworm beetles that can lay eggs. Managing volunteer corn early in the season is the best method to reduce the potential for yield losses from rootworm activity.

Volunteer Corn Prevention Tips
1. To reduce the potential for seed drop, corn products should be selected with good standability, stalk strength, and ear retention characteristics.
2. Insect protection traits can help reduce ear drop along with ear and kernel loss.
3. Proper combine adjustments can help minimize harvest loss.

Pre-Plant Management Tips
1. Using no-till practices can reduce seed-to-soil contact, thereby hindering volunteer corn germination.
2. In conventional-till situations, early fall tillage can stimulate germination and emergence prior to a winter freeze, thus reducing the potential for emergence the following spring.
3. If volunteer corn pressure is extremely high, a soybean crop should be considered because there are more herbicides labeled for soybean that offer good volunteer corn control. Select Max® Herbicide is one option for burndown or in-crop application (Table 1).
4. If there is a field with particularly high volunteer corn pressure, consider planting it last to allow as much of the volunteer corn to germinate prior to the final control measures (tillage, herbicides, etc.) before planting.
5. In corn-on-corn fields, the best option to control volunteer corn is to use a burndown application of Select Max® Herbicide or Gramoxone® SL 2.0 (Restricted Use Pesticide) plus a photosynthetic inhibiting herbicide prior to corn planting (Table 2). The addition of metribuzin in the tank mixture with Gramoxone SL 2.0 is recommended to improve the control of volunteer corn and provide residual weed control.

Corn Replant Management Tips
1. Tillage can help remove a poor corn stand.
2. Herbicide options for controlling volunteer corn in a replant situation can be found in Table 2. A plant-back restriction of six days makes Select Max® Herbicide a favorable option for controlling corn in a continuous corn replant situation.

Knowing the traits of the corn product that was planted last year is important when considering volunteer corn control options. Roundup® brand agricultural herbicides will provide

Table 1. Select Max® Herbicide options for controlling volunteer corn in soybean: The following recommendations apply to burndown and in-crop applications.^

<table>
<thead>
<tr>
<th>Volunteer corn height (inches)</th>
<th>Select Max Herbicide rate (fl oz/acre) when applied alone or with glyphosate*</th>
<th>Select Max Herbicide rate (fl oz/acre) when applied with dicamba**</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 or less</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>24 or less</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>36 or less</td>
<td>12</td>
<td>16</td>
</tr>
</tbody>
</table>

*Select Max Herbicide for grasses can be tank mixed with Roundup® brand glyphosate-only agricultural herbicides to control volunteer corn in Roundup Ready® and Genuity® Roundup Ready 2 Yield® soybeans. Select Max Herbicide does not require additional surfactant when tank mixed with Roundup brand glyphosate-only agricultural herbicides.
**Select Max Herbicide can be tank mixed with XtendiMax® herbicide with VaporGrip® Technology in Roundup Ready 2 Xtend® soybeans. A DRA is required with this tank mix, visit XtendiMaxapplicationrequirements.com for approved tank-mix partners.
^
These recommendations were provided by Valent®, XtendiMax® herbicide with VaporGrip® Technology is a restricted use pesticide for retail sale to and use only by Certified Applicators or persons under their direct supervision.
excellent control of volunteer corn that came from conventional or LibertyLink® (glufosinate-resistant) corn
trait products. Liberty® herbicide (glufosinate) can be used to help manage volunteer corn that came from
conventional or glyphosate-resistant corn products. However, these herbicides may not be effective on
volunteer corn that came from corn products stacked with one or more B.t. traits for insect protection, since these
products often contain the glyphosate-resistance trait and the glufosinate-resistance trait.

Table 2. Herbicide options for controlling volunteer corn in continuous corn: The following recommendations apply
to burndown and replant situations.*

<table>
<thead>
<tr>
<th>Herbicide and Adjuvant Rates</th>
<th>Minimum Gallons of Water/Acre</th>
<th>Volunteer Corn Height for Application</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td></td>
<td>Prior to reaching 12 inches</td>
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<tr>
<td>Select Max® Herbicide (6 fl oz/acre) + Non-ionic Surfactant (0.25% v/v) + Ammonium Sulfate (2.5 to 4.0 lbs/acre)</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option 2</td>
<td></td>
<td>1 to 3 inch corn, or 3 to 6 inch corn (see Gramoxone SL 2.0 rate differences above)</td>
<td></td>
</tr>
<tr>
<td>Gramoxone® SL2.0 (2.5 pt/acre for 1 to 3 inch corn) or (3.0 pt/acre for 3 to 6 inch corn) + Metribuzin DF (3.0 fl oz/acre) + Crop Oil Concentrate (COC) (1% v/v)</td>
<td>20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Control prior to crop emergence is critical as post-emergence options are limited. Restricted Use Pesticide

This document is intended to provide information about volunteer corn and guidelines for control. For additional information, contact your local seed representative. Developed in partnership with technology Development & Agronomy by Monsanto.