Plant-Incorporated Protectant Label
MON 89034 x TC1507 x MON 88017 x DAS-59122-7
Insect-Protected, Herbicide-Tolerant Corn
(Alternate Brand Name: Genuity® SmartStax®)
(OECD Unique Identifier: MON-89034-3 x DAS-Ø15Ø7-1 x MON-88017-3 x DAS-59122-7)

Active Ingredients:
Bacillus thuringiensis Cry1A.105 protein and the genetic material necessary for its production (vector PV-ZMIR245) in MON 89034 x TC1507 x MON 88017 x DAS-59122-7 corn (OECD Unique Identifier: MON-89034-3 x DAS-Ø15Ø7-1 x MON-88017-3 x DAS-59122-7) .................................................. ≤ 0.0026%*

Bacillus thuringiensis Cry2Ab2 protein and the genetic material necessary for its production (vector PV-ZMIR245) in MON 89034 x TC1507 x MON 88017 x DAS-59122-7 corn (OECD Unique Identifier: MON-89034-3 x DAS-Ø15Ø7-1 x MON-88017-3 x DAS-59122-7) .................................................. ≤ 0.0053%*

Bacillus thuringiensis Cry1F protein and the genetic material necessary for its production (vector PHP8999) in MON 89034 x TC1507 x MON 88017 x DAS-59122-7 corn (OECD Unique Identifier: MON-89034-3 x DAS-Ø15Ø7-1 x MON-88017-3 x DAS-59122-7) .................................................. ≤ 0.0012%*

Bacillus thuringiensis Cry3Bb1 protein and the genetic material necessary for its production (vector PV-ZMIR39) in MON 89034 x TC1507 x MON 88017 x DAS-59122-7 corn (OECD Unique Identifier: MON-89034-3 x DAS-Ø15Ø7-1 x MON-88017-3 x DAS-59122-7) .................................................. ≤ 0.0079%*

Bacillus thuringiensis Cry34Ab1 protein and the genetic material necessary (vector PHP17662) for its production in MON 89034 x TC1507 x MON 88017 x DAS-59122-7 corn (OECD Unique Identifier: MON-89034-3 x DAS-Ø15Ø7-1 x MON-88017-3 x DAS-59122-7) .................................................. ≤ 0.0194%*

Bacillus thuringiensis Cry35Ab1 protein and the genetic material necessary (vector PHP17662) for its production in MON 89034 x TC1507 x MON 88017 x DAS-59122-7 corn (OECD Unique Identifier: MON-89034-3 x DAS-Ø15Ø7-1 x MON-88017-3 x DAS-59122-7) .................................................. ≤ 0.0042%*

Other Ingredients:
CP4 EPSPS protein (5-enolpyruvylshikimate-3-phosphate synthase) and the genetic material necessary (vector PV-ZMIR39) for its production in MON 89034 x TC1507 x MON 88017 x DAS-59122-7 corn (OECD Unique Identifier: MON-89034-3 x DAS-Ø15Ø7-1 x MON-88017-3 x DAS-59122-7) .................................................. ≤ 0.0052%*

PAT protein (phosphinothricin acetyl transferase) and the genetic material necessary (vectors PHP17662 and PHP8999) for its production in MON 89034 x TC1507 x MON 88017 x DAS-59122-7 corn (OECD Unique Identifier: MON-89034-3 x DAS-Ø15Ø7-1 x MON-88017-3 x DAS-59122-7) .................................................. ≤ 0.00045%*

*Maximum percent (wt/wt) of dry forage

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Registration No. 524-581
EPA Establishment No. 524-MO-002
EPA Establishment No. 029964-IA-001

Monsanto Company

St. Louis, MO 63167

NET CONTENTS:_________
**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Information regarding commercial production reflected here and in the terms and conditions of this registration must be included in the Technology Use Guide.

MON 89034 × TC1507 × MON 88017 × DAS-59122-7 protects corn crops from leaf, stalk, and ear damage caused by corn borers and root damage caused by corn rootworm larvae. In order to minimize the risk of these pests developing resistance to MON 89034 × TC1507 × MON 88017 × DAS-59122-7 corn, an insect resistance management plan must be implemented which includes planting of a structured refuge. Growers who fail to comply with the IRM requirements risk losing access to Monsanto’s corn PIP products.

These refuge requirements do not apply to seed increase/propagation of inbred and hybrid seed corn and small scale research trials for observation.

Several options for deployment of the refuge for MON 89034 × TC1507 × MON 88017 × DAS-59122-7 are available to growers. These options are based on the planting of MON 89034 × TC1507 × MON 88017 × DAS-59122-7 in cotton or non-cotton growing regions and the insect pressure present in those locations. The refuge sizes for these regions are either 5% (i.e. 5 acres of non-\textit{Bt} corn for every 95 acres MON 89034 × TC1507 × MON 88017 × DAS-59122-7 planted) or 20% (20 acres of non-\textit{Bt} corn for every 80 acres of MON 89034 × TC1507 × MON 88017 × DAS-59122-7 planted), and are presented in the table below:

<table>
<thead>
<tr>
<th>Region</th>
<th>Refuge size</th>
<th>In-field or adjacent refuge</th>
<th>Refuge separated by up to ½ mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton belt where CEW is a significant pest and WCRW, NCRW and MCRW are not significant: NC, SC, GA, FL, TN, AL, MS, LA, AR, northern TX</td>
<td>20% non-\textit{Bt} corn</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cotton belt where CEW is a significant pest and MCRW is significant: southern TX</td>
<td>20% non-\textit{Bt} corn</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Cotton belt where CEW is not a significant pest and WCRW, NCRW and MCRW are not significant: NM, AZ, CA, NV</td>
<td>5% non-\textit{Bt} corn</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Non-cotton states where WCRW, NCRW and MCRW are not significant: OR, WA, ID, MT, WY, UT, CO, OK, VA, WV, PA, MD, DE, CT, RI, NJ, NY, ME, MA, NH, VT, HI, AK</td>
<td>5% non-\textit{Bt} corn</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Non-cotton-growing where WCRW, NCRW and/or MCRW are significant: KS, NE, SD, ND, MN, IA, MO, IL, WI, MI, IN, OH, KY</td>
<td>5% non-\textit{Bt} corn</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
If corn rootworms are significant within a region, the structured refuge must be planted as an in-field or adjacent refuge using corn hybrids that do not contain *Bt* technologies for the control of corn borers or corn rootworms. It can be planted as a block within or adjacent (e.g., across the road) to the MON 89034 × TC1507 × MON 88017 × DAS-59122-7, perimeter strips (i.e., strips around the field), or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least 4 consecutive rows wide. The refuge can be protected from lepidopteran damage by use of non-*Bt* insecticides if the population of one or more target lepidopteran pests of MON 89034 × TC1507 × MON 88017 × DAS-59122-7 in the refuge exceeds economic thresholds. In addition, the refuge can be protected from CRW damage by an appropriate seed treatment or soil insecticide; however, insecticides labeled for adult CRW control should be avoided in the refuge during the period of CRW adult emergence. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents, crop consultants). A schematic of one common refuge deployment option is shown below:

![Structured Refuge Diagram]

If corn rootworms are not significant within a region, the structured refuge may be planted as an in-field or adjacent refuge, or as a separate block that is within ½ mile of the MON 89034 × TC1507 × MON 88017 × DAS-59122-7 field. The structured refuge must be planted with corn hybrids that do not contain *Bt* technologies for the control of corn borers or corn rootworms. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents, crop consultants). A schematic of one refuge option with the refuge planted within a ½ mile of the MON 89034 × TC1507 × MON 88017 × DAS-59122-7 field is shown below:

![Separated Structured Refuge Diagram]
Corn Insects Controlled or Suppressed

European corn borer (ECB)  Ostrinia nubilalis
Southwestern corn borer (SWCB)  Diatraea grandiosella
Southern cornstalk borer (SCSB)  Diatraea crambidoides
Corn earworm (CEW)  Helicoverpa zea
Fall armyworm (FAW)  Spodoptera frugiperda
Stalk borer  Papalpema nebris
Lesser corn stalk borer  Elasmopalpus lignosellus
Sugarcane borer (SCB)  Diatraea saccharalis
Western bean cutworm (WBC)  Richia albicosta
Black cutworm  Agrotis ipsilon

Western corn rootworm (WCRW)  Diabrotica virgifera virgifera
Northern corn rootworm (NCRW)  Diabrotica barberi
Mexican corn rootworm (MCRW)  Diabrotica virgifera zeae

Sales of corn hybrids that contain Monsanto’s Bt corn plant pesticide must be accompanied by a Grower Guide which includes information on planting, production and insect resistance management and notes that routine applications of insecticides to control these insects are usually unnecessary when corn containing the Bt proteins is planted.

MON 89034 x TC1507 x MON 88017 x DAS-59122-7 is a product of Monsanto's and Dow AgroSciences' research programs, offering unique genetic characteristics for specific grower needs and may be protected by one or more of the following U.S. patents: 5,717,084; 5,728,925; 6,025,545; 6,051,753; 6,063,597; 6,083,878; 6,489,542; 6,645,497; 7,700,830; 6,713,063; 6,962,705; 7,064,249; 7,070,982; 7,250,501; 7,304,206; 7,544,862; 7,618,942; 7,927,598; 8,034,997; 8,212,113; 6,083,499; 6,127,180; 6,218,188; 6,340,593; 6,548,291; 6,624,145; 6,893,872; 6,900,371; 6,943,282 and 7,956,246.