September 28, 2015

David Chi
Regulatory Affairs Manager
Monsanto Company
800 North Lindbergh Blvd.
St. Louis, MO 63167

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – To extend
the registration expiration date and amend the label to correct the ingredient statement,
add a website and make other minor label revisions
Product Name: MON 89034 x MON 88017
EPA Registration Number: 524-576
Application Date: April 3, 2015
OPP Decision Number: 509396

Dear Mr. Chi:

The amended labeling, referred to above, submitted in connection with registration under Sec.
3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is
acceptable and the expiration date of the registration has been hereby extended to January 31, 2016.

This approval does not affect any terms or conditions that were previously imposed on this registration.
You continue to be subject to existing terms or conditions on your registration and any deadlines
connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously
accepted labeling.

Should you wish to add/retain a reference to your company's website on your label, then please be
aware that the website becomes labeling under FIFRA and is subject to review by the U.S.
Environmental Protection Agency (EPA). If the website is false or misleading, the product will be
considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section
12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or
misleading. In addition, regardless of whether a website is referenced on your product's label, claims
made on the website may not substantially differ from those claims approved through the registration
process. Therefore, should the EPA find or if it is brought to our attention that a website contains false
or misleading statements or claims substantially differing from the EPA-approved registration, the
website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Ann Sibold of my team by phone at (703) 305-6502 or via email at sibold.ann@epa.gov.

Sincerely,

Alan Reynolds, Team Leader
Microbial Pesticide Branch
Biopesticides and Pollution
 Prevention Division (7511P)
Office of Pesticide Programs

Enclosure

Plant-Incorporated Protectant Label
MON 89034 × MON 88017
Lepidopteran-and Rootworm-Protected Corn
(Alternate Brand Names:
MON 89034 × MON 88017 field corn – Genuity® VT Triple PRO®
MON 89034 × MON 88017 sweet corn – Performance Series™)
(OECD Unique Identifier: MON-89Ø34-3 × MON 88Ø17-3)

Active Ingredients:

Bacillus thuringiensis Cry1A.105 protein and the genetic material necessary for its production (vector PV-ZMIR245) in MON 89034 × MON 88017 corn (OECD Unique Identifier: MON-89Ø34-3 × MON-88Ø17-3) ....≤ 0.0024%*

Bacillus thuringiensis Cry2Ab2 protein and the genetic material necessary for its production (vector PV-ZMIR245) in MON 89034 × MON 88017 corn (OECD Unique Identifier: MON-89Ø34-3 × MON-88Ø17-3) ....≤ 0.0057%*

Bacillus thuringiensis Cry3Bb1 protein and the genetic material necessary for its production (vector PV-ZMIR39) in MON 89034 × MON 88017 corn (OECD Unique Identifier: MON-89Ø34-3 × MON-88Ø17-3) ....≤ 0.0070%*

Other Ingredient:

CP4 EPSPS protein (5-enolpyruvylshikimate-3-phosphate synthase) and genetic material necessary for its production (vector PV-ZMIR39) in MON 89034 × MON 88017 corn (OECD Unique Identifier: MON-89Ø34-3 × MON-88Ø17-3) ....≤ 0.0069%*

*Percentage (wt/wt) on a dry weight basis whole plant (forage)
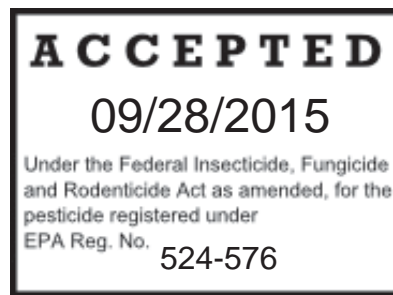
KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Registration No. 524-576
EPA Establishment No. 524-MO-002

Monsanto Company
800 North Lindbergh Blvd.
St Louis, MO 63167

NET CONTENTS_____

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ACCEPTED
09/28/2015
Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No.
              524-576
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<u>**DIRECTIONS FOR USE**</u>

It is a violation of Federal law to use this product in any manner inconsistent with this labeling. Information regarding commercial production must be included in the Technology Use Guide and/or IRM Grower Guide.

MON 89034 × MON 88017 protects corn crops from leaf, stalk, and ear damage caused by corn borers and root damage caused by corn rootworm larvae.

This plant-incorporated protectant (PIP) may be combined through conventional breeding with other registered plant-incorporated protectants that are similarly approved for use in combination, through conventional breeding, with other registered plant-incorporated protectants to produce inbred corn lines and hybrid corn varieties with combined pesticidal traits.

1) Refuge Requirements for MON 89034 × MON 88017 Field Corn

In order to minimize the risk of corn borers and corn rootworms developing resistance to MON 89034 × MON 88017 corn, an insect resistance management plan must be implemented which includes planting of a structured refuge.

These refuge requirements do not apply to seed increase/propagation of inbred and hybrid seed corn up to a total of 20,000 acres per county and up to a combined United States (U.S.) total of 250,000 acres per plant-incorporated protectant (PIP) active ingredient per registrant per year. Furthermore, these refuge requirements do not apply to commercial hybrid sweet corn.
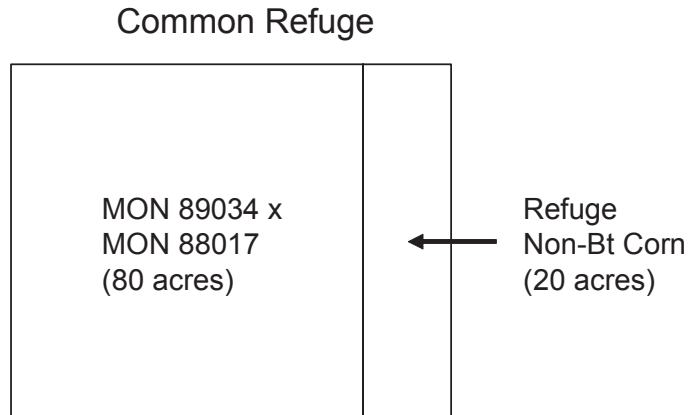
The refuge and MON 89034 × MON 88017 corn should be sown on the same day, or with the shortest window possible between planting dates to ensure that corn root development is similar among varieties. If the refuge is planted on rotated ground, then the MON 89034 × MON 88017 corn must also be planted on rotated ground. If the combined refuge is planted on continuous corn, then MON 89034 × MON 88017 may be planted on either continuous or rotated land (option encouraged where WCRW rotation resistant biotype may be present). Refuge options are based on the planting of MON 89034 × MON 88017 in cotton or non-cotton growing regions and the insect pressure present in those locations. If insecticides are applied to the refuge for control of CRW adults, the same treatment must also be applied in the same timeframe to MON 89034 × MON 88017.

a) Corn-Belt/Non-Cotton Growing Area Refuge Requirements

For MON 89034 × MON 88017 field corn grown outside cotton-growing areas (e.g., the Corn Belt), two options for deployment of the refuge are available to growers.

The first option is planting a **common refuge** for both corn borers and corn rootworms. The common refuge must be planted with corn hybrids that do not contain Bt technologies for the control of corn borers or corn rootworms. The refuge area must represent at least 20% of the grower's corn acres (i.e., sum of MON 89034 × MON 88017 acres and refuge acres; refuge area must contain 20 acres of corn for every 80 acres of MON 89034 × MON 88017 corn planted). It must be planted as block within or adjacent (e.g., across the road) to the MON 89034 × MON 88017 field, 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 common refuge can be treated with a soil-applied or seed-applied insecticide to control rootworm larvae and other soil pests. The refuge can also be treated with a non-Bt foliar insecticide for the control
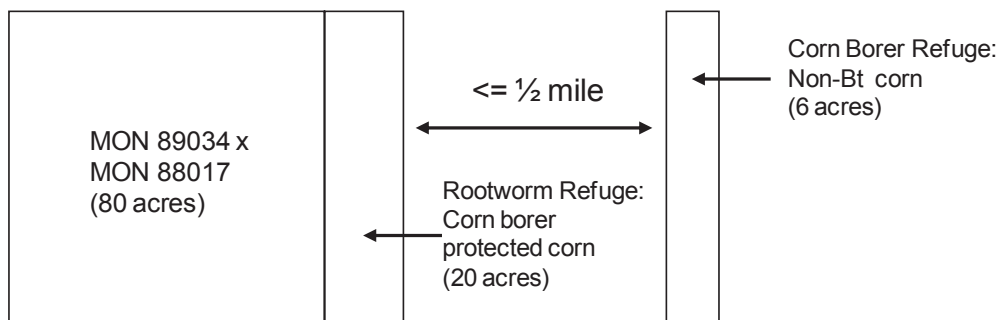
of late season pests if pest pressure reaches an economic threshold for damage; however, if rootworm adults are present at the time of foliar applications then the MON 89034 × MON 88017 field (acres) must be treated in a similar manner. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents, crop consultants, etc.). A schematic illustration of one common refuge deployment option is shown below:

Common Refuge

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│                             │          │
│                             │          │
│   MON 89034 x               │  ◄────── │  Refuge
│   MON 88017                 │          │  Non-Bt Corn
│   (80 acres)                │          │  (20 acres)
│                             │          │
│                             │          │
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The second option is planting **separate refuge** areas (e.g., two refuge areas, a double refuge, or paired refuge areas) for corn borers and corn rootworms. Refuge planting options include: separate fields, blocks within fields (e.g., along the edges or headlands), perimeter strips, or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least 4 consecutive rows wide. The corn borer refuge must be planted with corn that is not a lepidopteran-protected Bt hybrid, must represent at least 5% of the grower's corn acres, and must be planted within ½ mile of the MON 89034 × MON 88017 field. The corn borer refuge can be treated with a soil-applied or seed-applied insecticide for corn rootworm larval control, or a non-Bt foliar applied insecticide for corn borer control if pest pressure reaches an economic threshold for damage. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents, crop consultants, etc.).

The corn rootworm refuge must be planted with corn that is not a corn rootworm-protected Bt hybrid, but can be planted with Bt hybrids that control corn borers. The corn rootworm refuge must represent at least 20% of the grower's corn acres (i.e., corn rootworm refuge must contain 20 acres of corn for every 80 acres of MON 89034 × MON 88017 corn planted) and must be planted as a block within or adjacent to the MON 89034 × MON 88017 field, strips around the field, perimeter strips, or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least 4 consecutive rows wide. The corn rootworm refuge can be treated with a soil-applied or seed-applied insecticide to control rootworm larvae and other soil pests. The refuge can also be treated with a non-Bt foliar insecticide for control of late season pests; however, if corn rootworm adults are present at the time of foliar applications then the MON 89034 × MON 88017 field must be treated in a similar manner. A schematic illustration of one separate refuge option with the corn rootworm refuge planted as a block within the field and the corn borer refuge planted within a ½ mile of the MON 89034 × MON 88017 field is shown below:
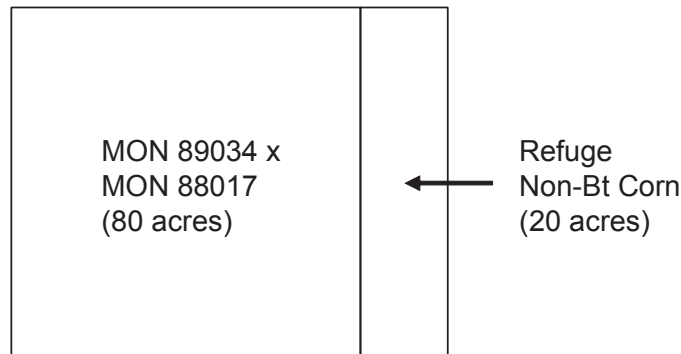
Separate Refuge

b) Cotton-Growing Area Refuge Requirements

Cotton-growing areas include the following states: Alabama, Arkansas, Georgia, Florida, Louisiana, North Carolina, Mississippi, South Carolina, Oklahoma (only the counties of Beckham, Caddo, Comanche, Custer, Greer, Harmon, Jackson, Kay, Kiowa, Tillman, Washita), Tennessee (only the counties of Carroll, Chester, Crockett, Dyer, Fayette, Franklin, Gibson, Hardeman, Hardin, Haywood, Lake, Lauderdale, Lincoln, Madison, ' Obion, Rutherford, Shelby, and Tipton), Texas (except the counties of Carson, Dallam, Hansford, Hartley, Hutchinson, Lipscomb, Moore, Ochiltree, Roberts, and Sherman), Virginia (only the counties of Dinwiddie, Franklin City, Greensville, Isle of Wight, Northampton, Southampton, Suffolk City, Surrey, Sussex) and Missouri (only the counties of Dunklin, New Madrid, Pemiscot, Scott, Stoddard).

For MON 89034 × MON 88017 field corn grown in cotton growing areas of the U.S. the common refuge and separate refuge options (e.g., two-refuge options, double-refuge options, paired-refuge options) are available as specified below.

The first option is planting a **common refuge** for both corn borers and corn rootworms. The common refuge must be planted with corn hybrids that do not contain Bt technologies for the control of corn borers or corn rootworms. The refuge area must represent at least 20% of the grower's corn acres (i.e., sum of MON 89034 × MON 88017 acres and refuge acres; refuge area must contain 20 acres of corn for every 80 acres of MON 89034 × MON 88017 corn planted). It must be planted as block within or adjacent (e.g., across the road) to the MON 89034 × MON 88017 field, 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 common refuge can be treated with a soil-applied or seed-applied insecticide to control rootworm larvae and other soil pests. The refuge can also be treated with a non-Bt foliar insecticide for the control of late season pests if pest pressure reaches an economic threshold for damage; however, if rootworm adults are present at the time of foliar applications then the MON 89034 × MON 88017 field (acres) must be treated in a similar manner. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents, crop consultants, etc.). A schematic illustration of one common refuge deployment option is shown below:
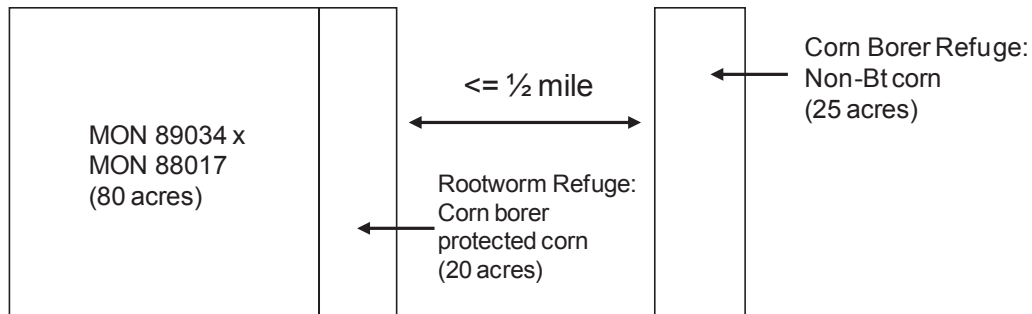
Common Refuge

| MON 89034 x MON 88017 (80 acres) | ← Refuge Non-Bt Corn (20 acres) |

The second option is planting **separate refuge** areas (e.g., two refuge areas, a double refuge, or paired refuge areas) for corn borers and corn rootworms. Refuge planting options include: separate fields, blocks within fields (e.g., along the edges or headlands), perimeter strips, or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least 4 consecutive rows wide. The corn borer refuge must be planted with corn that is not a lepidopteran-protected Bt hybrid, must represent at least 20% of the grower's corn acres, and must be planted within ½ mile of the MON 89034 × MON 88017 field. The corn borer refuge can be treated with a soil-applied or seed-applied insecticide for corn rootworm larval control, or a non-Bt foliar applied insecticide for corn borer control if pest pressure reaches an economic threshold for damage. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents, crop consultants, etc.).

The corn rootworm refuge must be planted with corn that is not a corn rootworm-protected Bt hybrid, but can be planted with Bt hybrids that control corn borers. The corn rootworm refuge must represent at least 20% of the grower's corn acres (i.e., corn rootworm refuge must contain 20 acres of corn for every 80 acres of MON 89034 × MON 88017 corn planted) and must be planted as a block within or adjacent to the MON 89034 × MON 88017 field, perimeter strips, or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least 4 consecutive rows wide. The corn rootworm refuge can be treated with a soil-applied or seed-applied insecticide to control rootworm larvae and other soil pests. The refuge can also be treated with a non-Bt foliar insecticide for control of late season pests; however, if corn rootworm adults are present at the time of foliar applications then the MON 89034 × MON 88017 field must be treated in a similar manner. A schematic illustration of one separate refuge option with the corn rootworm refuge planted as a block within the field and the corn borer refuge planted within a ½ mile of the MON 89034 × MON 88017 field is shown below:

Separate Refuge

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┌──────────────────────┬──┐        ┌──────┐
│                      │  │        │      │ ←──── Corn Borer Refuge:
│                      │  │        │      │        Non-Bt corn
│                      │  │ <= ½ mile       │      │        (25 acres)
│  MON 89034 x         │  │ ←──────────→    │      │
│  MON 88017           │  │        │      │
│  (80 acres)          │  │ Rootworm Refuge:│      │
│                      │  │ Corn borer      │      │
│                      │  │ protected corn  │      │
│                      │  │ (20 acres)      │      │
│                      │  │ ←───────────────│      │
│                      │  │        │      │
└──────────────────────┴──┘        └──────┘
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2) Post-Harvest Requirements for MON 89034 × MON 88017 Sweet Corn

For MON 89034 × MON 88017 sweet corn, growers are required to destroy any MON 89034 × MON 88017 sweet corn stalks that remain in the field following harvest via rotary mowing, discing, or plow-down or (for home garden use) by chopping up the stalks using home garden tools such as a hoe within one (1) month of harvest, but preferably within 14 days.

Corn Insects Controlled

European corn borer	*Ostrinia nubilalis*
Southwestern corn borer	*Diatraea grandiosella*
Southern cornstalk borer	*Diatraea crambidoides*
Corn earworm	*Helicoverpa zea*
Fall armyworm	*Spodoptera frugiperda*
Stalk borer	*Papaipema nebris*
Lesser corn stalk borer	*Elasmopappus lignosellus*
Sugarcane borer	*Diatraea saccharalis*
Western corn rootworm	*Diabrotica virgifera virgifera*
Northern corn rootworm	*Diabrotica barberi*
Mexican corn rootworm	*Diabrotica virgifera zeae*

Sales of corn hybrids that contain Monsanto's Bt corn plant incorporated protectants 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 × MON 88017 is a product of Monsanto's research program offering unique genetic characteristics for specific grower needs and may be protected by one or more U.S. patents found at the following web page: www.monsantotechnology.com.