



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY
BOARD OF PESTICIDES CONTROL
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

WALTER E. WHITCOMB
COMMISSIONER

HENRY JENNINGS
DIRECTOR

To: Board of Pesticides Control Members
From: Mary Tomlinson, Pesticides Registrar/Water Quality Specialist
RE: Syngenta Bt-Corn Products with Pending Maine Registration Status
Date: January 7, 2013

Enclosed for your review are copies of the federally accepted labels and proposed state product labels for two Bt-corn products from Syngenta Seeds, Inc. with pending Maine registrations, Agrisure Viptera 3220 Refuge Renew (Bt11 x MIR162 x TC507 Corn), EPA Reg. No. 67979-15, and Agrisure 3122 (Bt11 x DAS-59122-7 x MIR604 x TC1507), EPA Reg. No. 67979-17. The Bt-proteins in these two products are present in other currently Maine registered Bt corn. They differ from previously registered Bt-corn in that they do not have a 20% spatial refuge nor are they refuge in a bag (RIB) products. The spatial refuge of these products has been reduced to 5%. These products have undergone review by the Board's Plant Incorporated Protectant Technical Committee regarding changes in refuge requirements. The report from this committee is presented under separate cover in the Board packet.

Agrisure™ Viptera™ 3220 Refuge renew

[Bt11 x MIR162 X TC1507 Corn]

OECD Unique Identifier: SYN-BTØ11-1 x SYN-IR162-4 x DAS-Ø15Ø7-1

**Plant-incorporated protectant:
Cry1Ab, Vip3Aa20 and Cry1F proteins for control of corn borers and other lepidopteran
pests**

This product is effective in controlling corn leaf, stalk, and ear damage caused by certain lepidopteran pests.

Active Ingredients:

Bacillus thuringiensis Cry1Ab delta-endotoxin protein and the genetic material necessary for its production (via elements of vector pZO1502) in Bt11 corn (SYN-BTØ11-1)≤0.00103%*

Bacillus thuringiensis Vip3Aa20 insecticidal protein and the genetic material necessary for its production (via elements of vector pNOV1300) in MIR162 corn (SYN-IR162-4)..... ≤0.00256%*

Bacillus thuringiensis Cry1F delta-endotoxin protein and the genetic material necessary for its production (plasmid insert PHI8999A) in TC1507 corn (DAS-Ø15Ø7-1).....≤0.00077%*

Other Ingredients:

A marker protein and the genetic material necessary for its production (via plasmid insert PHI8999A and elements of vector pZO1502) in TC1507corn (DAS-Ø15Ø7-1) and Bt11 corn (SYN-BTØ11-1)≤0.00017%*

A marker protein and the genetic material necessary for its production (via elements of vector pNOV1300) in MIR162 corn (SYN-IR162-4).... ≤0.00025%*

*Percent (wt/wt) of whole plant on a dry weight basis

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

EPA Registration No. 67979-15

Syngenta Seeds, Inc. - Field Crops - NAFTA

™ Agrisure is a trademark of a Syngenta Group company

™ Viptera is a trademark of a Syngenta Group company

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

The subject registration will automatically expire on midnight March 29, 2023.

This plant-incorporated protectant 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.

All corn seed that contains the plant-incorporated protectant sold or distributed by Syngenta Seeds, Inc. or its distributors must be accompanied by informational material (e.g., a bag tag) indicating the registration number (67979-15) and the active ingredients, and stipulating that growers read the Grower Guide (or equivalent guidance) prior to planting the seed.

Insects Controlled or Suppressed

Field corn has been genetically transformed to produce the insecticidal proteins, Cry1Ab, Vip3Aa20 and Cry1F, for control or suppression of the following lepidopteran insects:

European corn borer (*Ostrinia nubilalis*)
Southwestern corn borer (*Diatraea grandiosella*)
Southern cornstalk borer (*Diatraea crambidoides*)
Corn earworm (*Helicoverpa zea*)
Fall armyworm (*Spodoptera frugiperda*)
Beet armyworm (*Spodoptera exigua*)
Black cutworm (*Agrotis ipsilon*)
Western bean cutworm (*Striacosta albicosta*)
Sugarcane borer (*Diatraea saccharalis*)
Lesser cornstalk borer (*Elasmopalpus lignosellus*)
Dingy Cutworm (*Feltia jaculifera*)
Common stalk borer (*Papaipema nebris*)

Insect Resistance Management

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.

Refuge Requirements for Bt11 x MIR162 x TC1507 Corn

The following information regarding commercial production of Bt11 x MIR162 x TC1507 corn must be included in the Grower Guide (or equivalent).

Grower agreements (also known as stewardship agreements) will specify that growers must adhere to the refuge requirements as described in the grower guide/product use guide and/or in supplements to the grower guide/product use guide.

- Specifically, growers must plant a structured refuge of at least 5% non-*Bt* corn (20% in cotton growing* areas) and/or nonlepidopteran-resistant *Bt* corn that may be treated with insecticides, as detailed below, to control lepidopteran stalk-boring and other pests.
- Refuge planting options include the following: separate fields, blocks within fields (e.g., along the edges or headlands), perimeter strips, and strips across the field.
- An external refuge must be planted within 1/2 mile of the Bt11 x MIR162 x TC1507 corn field.
- When planting the refuge as strips across the field or as perimeter strips, the refuge must be at least four consecutive rows wide.
- Insecticide treatments for control of European corn borer (ECB), corn earworm (CEW), southwestern corn borer (SWCB), and other lepidopteran pests listed on the label, grower guides or other educational material may be applied only if economic thresholds are reached for one or more of these target pests. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents or crop consultants). Instructions to growers will specify that microbial *Bt* insecticides must not be applied to non-*Bt* corn and/or nonlepidopteran-resistant *Bt* corn refuges.

***Cotton-Growing Areas (as Identified by EPA) Required to Plant 20% Refuge Corn**

Alabama – all counties

Arkansas – all counties

Florida – all counties

Georgia – all counties

Louisiana – all counties

Mississippi – all counties

Missouri – counties of:

Dunklin Scott

New Madrid Stoddard

Pemiscot

North Carolina – all counties

Oklahoma – counties of:

Beckham Jackson

Caddo Kay

Comanche Kiowa

Custer Tillman

Greer Washita

Harmon

South Carolina – all counties

Tennessee – counties of:

Carroll Haywood

Chester Lake

Crockett Lauderdale

Dyer Lincoln

Fayette Madison

Franklin Obion

Gibson Rutherford

Hardeman Shelby

Hardin Tipton

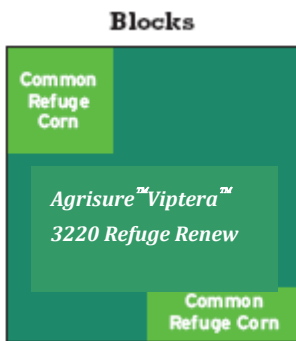
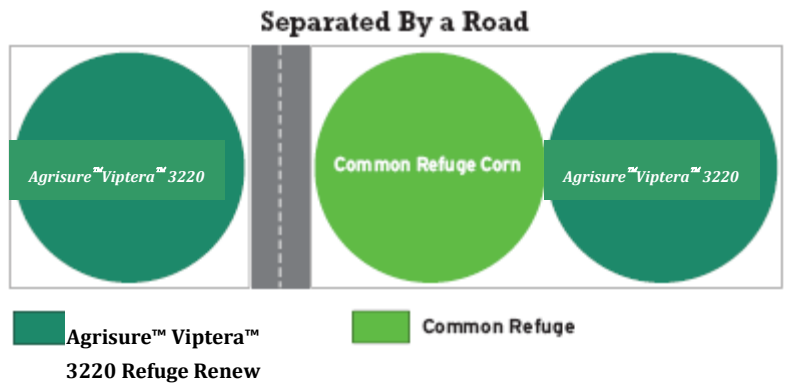
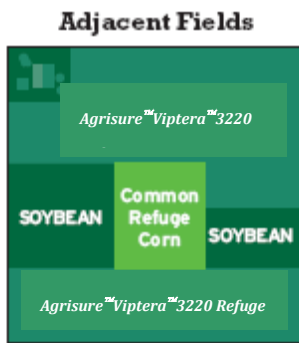
Texas – all counties **EXCEPT:**

Carson Lipscomb

Dallam Moore

Hansford Ochiltree

Hartley Roberts
Hutchinson Sherman
(NOTE: these counties are
required to plant at least
5% refuge corn)
Virginia – counties of:
Dinwiddie Southampton
Franklin City Suffolk City
Greensville Surrey
Isle of Wight Sussex
Northampton
* Identified by EPA as cotton
growing areas.



Grower agreements will specify that growers must adhere to the refuge requirements that will be described in the Grower Guide {IRM Guide} for Bt11 x MIR162 x TC1507 corn or other applicable product use documents.

Below is the text and graphics indicating the refuge size requirement to be included on Bt11 x MIR162 x TC1507 corn seed bags or bag tags.

**Important grower information.
Please read before planting.**

<p style="font-size: 2em; margin: 0;">5%</p> <p style="font-size: 1.5em; margin: 0;">refuge</p> <p style="margin: 0;">Corn-growing areas</p>	or	<p style="font-size: 2em; margin: 0;">20%</p> <p style="font-size: 1.5em; margin: 0;">refuge</p> <p style="margin: 0;">Cotton-growing areas</p>
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For more information, please refer to the Syngenta Stewardship guide

MAR 29 2011

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. 67979-15

Bt11 x MIR162 x TC1507 Corn

[Alternate brand name: *Agrisure*[™] *Viptera*[™] 3220 Refuge Renew]

OECD Unique Identifier: SYN-BT011-1 x SYN-IR162-4 x DAS-01507-1

Plant-incorporated protectant: Cry1Ab, Vip3Aa20 and Cry1F proteins for control of corn borers and other lepidopteran pests

This product is effective in controlling corn leaf, stalk, and ear damage caused by certain lepidopteran pests.

Active Ingredients:

Bacillus thuringiensis Cry1Ab delta-endotoxin protein and the genetic material necessary for its production (via elements of vector pZO1502) in Bt11 corn (SYN-BT011-1)≤0.00103%*

Bacillus thuringiensis Vip3Aa20 insecticidal protein and the genetic material necessary for its production (via elements of vector pNOV1300) in MIR162 corn (SYN-IR162-4)..... ≤0.00256%*

Bacillus thuringiensis Cry1F delta-endotoxin protein and the genetic material necessary for its production (plasmid insert PHI8999A) in TC 1507 corn (DAS-01507-1).....≤0.00077%*

Other Ingredients:

A marker protein and the genetic material necessary for its production (via plasmid insert PHI8999A and elements of vector pZO1502) in TC 1507 corn (DAS-01507-1) and Bt11 corn (SYN-BT011-1)≤0.00017%*

A marker protein and the genetic material necessary for its production (via elements of vector pNOV1300) in MIR162 corn (SYN-IR162-4).....≤0.00025%*

*Percent (wt/wt) of whole plant on a dry weight basis

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

EPA Registration No. 67979-15
EPA Establishment No. 66736-NC-01

Syngenta Seeds, Inc. - Field Crops - NAFTA
P.O. Box 12257
3054 East Cornwallis Rd.
Research Triangle Park, NC 27709

[™] Agrisure is a trademark of a Syngenta Group company
[™] Viptera is a trademark of a Syngenta Group company

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

The subject registration will automatically expire on midnight March 29, 2023.

This plant-incorporated protectant 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.

All corn seed that contains the plant-incorporated protectant sold or distributed by Syngenta Seeds, Inc. or its distributors must be accompanied by informational material (e.g., a bag tag) indicating the registration number (67979-15) and the active ingredients, and stipulating that growers read the Grower Guide (or equivalent guidance) prior to planting the seed.

Insects Controlled or Suppressed

Field corn has been genetically transformed to produce the insecticidal proteins, Cry1Ab, Vip3Aa20 and Cry1F, for control or suppression of the following lepidopteran insects:

European corn borer (*Ostrinia nubilalis*)
Southwestern corn borer (*Diatraea grandiosella*)
Southern cornstalk borer (*Diatraea crambidoides*)
Corn earworm (*Helicoverpa zea*)
Fall armyworm (*Spodoptera frugiperda*)
Beet armyworm (*Spodoptera exigua*)
Black cutworm (*Agrotis ipsilon*)
Western bean cutworm (*Striacosta albicosta*)
Sugarcane borer (*Diatraea saccharalis*)
Lesser cornstalk borer (*Elasmopalpus lignosellus*)
Dingy cutworm (*Feltia jaculifera*)
Common stalk borer (*Papaipema nebris*)

Insect Resistance Management

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.

Refuge Requirements for Bt11 x MIR162 x TC1507 Corn

The following information regarding commercial production of Bt11 x MIR162 x TC1507 corn must be included in the Grower Guide (or equivalent).

Grower agreements (also known as stewardship agreements) will specify that growers must adhere to the refuge requirements as described in the grower guide/product use guide and/or in supplements to the grower guide/product use guide.

- Specifically, growers must plant a structured refuge of at least 5% non-*Bt* corn (20% in cotton-growing* areas) and/or nonlepidopteran-resistant *Bt* corn that may be treated with insecticides, as detailed below, to control lepidopteran stalk-boring and other pests.
- Refuge planting options include the following: separate fields, blocks within fields (e.g., along the edges or headlands), perimeter strips, and strips across the field.
- An external refuge must be planted within 1/2 mile of the Bt11 x MIR162 x TC1507 corn field.
- When planting the refuge as strips across the field or as perimeter strips, the refuge must be at least four consecutive rows wide.
- Insecticide treatments for control of European corn borer (ECB), corn earworm (CEW), southwestern corn borer (SWCB), and other lepidopteran pests listed on the label, grower guides, or other educational material may be applied only if economic thresholds are reached for one or more of these target pests. Economic thresholds will be determined using methods recommended by local or regional professionals (e.g., Extension Service agents or crop consultants). Instructions to growers will specify that microbial *Bt* insecticides must not be applied to non-*Bt* corn and/or nonlepidopteran-resistant *Bt* corn refuges.

***Cotton-Growing Areas (as Identified by EPA) Required to Plant 20% Refuge Corn**

Alabama – all counties

Arkansas – all counties

Florida – all counties

Georgia – all counties

Louisiana – all counties

Mississippi – all counties

Missouri – counties of:

Dunklin Scott

New Madrid Stoddard

Pemiscot

North Carolina – all counties

Oklahoma – counties of:

Beckham Jackson

Caddo Kay

Comanche Kiowa

Custer Tillman

Greer Washita

Harmon

South Carolina – all counties

Tennessee – counties of:

Carroll Haywood

Chester Lake

Crockett Lauderdale

Dyer Lincoln

Fayette Madison

Franklin Obion

Gibson Rutherford

Hardeman Shelby

Hardin Tipton

Texas – all counties EXCEPT:

Carson Lipscomb

Dallam Moore

Hansford Ochiltree

Hartley Roberts

Hutchinson Sherman

(NOTE: these counties are

required to plant at least

5% refuge corn)

Virginia – counties of:

Dinwiddie Southampton

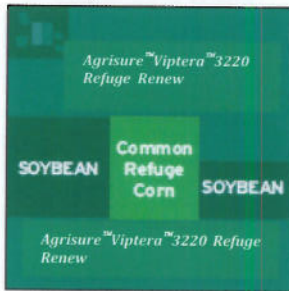
Franklin City Suffolk City

Greensville Surrey

Isle of Wight Sussex


Northampton

Adjacent Fields



Separated By a Road



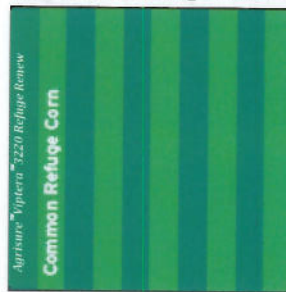
 Agrisure™ Viptera™
3220 Refuge Renew

 Common Refuge

Blocks



Adjacent Multiple Rows



Perimeter



[Bt11xDAS-59122-7xMIR604xTC1507 Corn]

**Plant-incorporated protectant:
Cry1Ab, Cry34Ab1, Cry35Ab1, mCry3A and Cry1F insecticidal proteins**

This product is effective in controlling corn leaf, stalk, root and ear damage caused by corn rootworms and certain lepidopteran pests.

Active Ingredients:

Bacillus thuringiensis Cry1Ab delta-endotoxin protein and the genetic material necessary for its production (via elements of vector pZO1502) in corn event Bt11 (SYN-BTØ11-1)..... ≤0.006392%*

Bacillus thuringiensis Cry34Ab1 delta-endotoxin protein and the genetic material necessary for its production (via elements of vector PHP17662) in corn event DAS 59122-7 (DAS-59122-7) ≤0.02162%*

Bacillus thuringiensis Cry35Ab1 delta-endotoxin protein and the genetic material necessary for its production (via elements of vector PHP17662) in corn event DAS-59122-7(DAS-59122-7) ≤0.004242%*

Bacillus thuringiensis mCry3A insecticidal protein and the genetic material necessary for its production (via elements of vector pZM26) in corn event MIR604 (SYN-IR6Ø4-8)..... ≤0.0004888%*

Bacillus thuringiensis Cry1F delta-endotoxin protein and the genetic material necessary for its production (via elements of vector PHI8999A) in corn event TC1507 (DAS-Ø15Ø7-1) ≤0.001071%*

Other Ingredients:

A marker protein and the genetic material necessary for its production (via plasmid insert PHI8999A and elements of vector pZO1502) in corn events TC1507 (DAS-Ø15Ø7-1) and Bt11 (SYN-BTØ11-1)..... ≤0.000837%*

A marker protein and the genetic material necessary for its production (via elements of vector pNOV1300) in corn event MIR604 (SYN-IR6Ø4-8)..... ≤0.000444%*

*Percent (wt/wt) of whole plant on a dry weight basis

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

EPA Registration No. 67979-17
EPA Establishment No. 66736-NC-01

Syngenta Seeds, Inc. - Field Crops - NAFTA
P.O. Box 12257, 3054 East Cornwallis Rd.
Research Triangle Park, NC 27709

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

The subject registration will automatically expire on midnight XXXX XX, 20XX.

This plant-incorporated protectant 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.

All corn seed that contains the plant-incorporated protectant sold or distributed by Syngenta Seeds, Inc. or its distributors must be accompanied by informational material (e.g., a bag tag) indicating the registration number (67979-17) and the active ingredients, and stipulating that growers read the Grower Guide (or equivalent guidance) prior to planting the seed.

Insects Controlled or Suppressed

Field corn has been genetically transformed to produce the insecticidal proteins, Cry1Ab, Cry34Ab1, Cry35Ab1, mCry3A and Cry1F, for control or suppression of the following coleopteran and lepidopteran insects:

European corn borer (*Ostrinia nubilalis*)
Southwestern corn borer (*Diatraea grandiosella*)
Southern cornstalk borer (*Diatraea crambidoides*)
Corn earworm (*Helicoverpa zea*)
Fall armyworm (*Spodoptera frugiperda*)
Beet armyworm (*Spodoptera exigua*)
Black cutworm (*Agrotis ipsilon*)
Western bean cutworm (*Striacosta albicosta*)
Sugarcane borer (*Diatraea saccharalis*)
Lesser cornstalk borer (*Elasmopalpus lignosellus*)
Dingy Cutworm (*Feltia jaculifera*)
Common stalk borer (*Papaipema nebris*)
Western corn rootworm (*Diabrotica virgifera virgifera*)
Northern corn rootworm (*Diabrotica barberi*)

Mexican corn rootworm (*Diabrotica virgifera zea*)

Insect Resistance Management

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.

Refuge Requirements for Bt11 x DAS-59122-7 x MIR604 x TC1507 Corn

Grower agreements (also known as stewardship agreements) will specify that growers must adhere to the refuge requirements as described in the grower guide/product use guide and/or in supplements to the grower guide/product use guide.

The following information regarding commercial production of Bt11xDAS-59122-7xMIR604xTC1507 corn must be included in the Grower Guide (or equivalent). Growers must plant a refuge when using this product.

Two options for deployment of the refuge are allowed:

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 pests. The refuge area must represent at least 5% (or 50% in cotton growing areas) of the grower's corn acres (i.e., sum of Bt11xDAS-59122-7xMIR604xTC1507 corn acres and refuge acres). It must be planted as a block adjacent to the Bt11xDAS-59122-7xMIR604xTC1507 corn field, perimeter strips, or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least four consecutive rows wide. If the common refuge is planted on rotated ground, then Bt11xDAS-59122-7xMIR604xTC1507 corn must also be planted on rotated ground. If the common refuge is planted in continuous corn, the Bt11xDAS-59122-7xMIR604xTC1507 cornfield may be planted on either continuous or rotated land. 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 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 Bt11xDAS-59122-7xMIR604xTC1507 corn field 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 or crop consultants). Pests other than adult corn rootworms can be treated with an appropriate pest-labeled insecticide on the common refuge acres without treating the Bt11xDAS-59122-7xMIR604xTC1507 corn acres only if treatment occurs when adult corn rootworms are not present. Pests on the Bt11xDAS-59122-7xMIR604xTC1507 corn acres can be treated as needed without having to treat the common refuge.

The second option is planting separate refuge areas for corn borers and corn rootworms. The

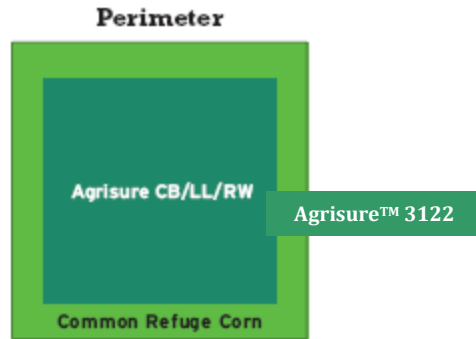
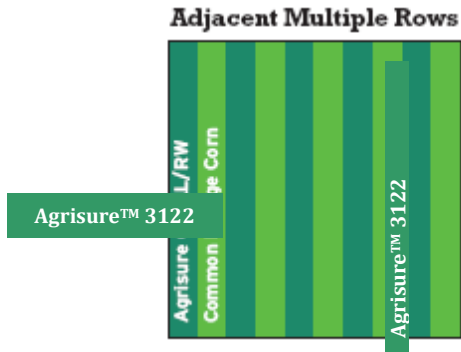
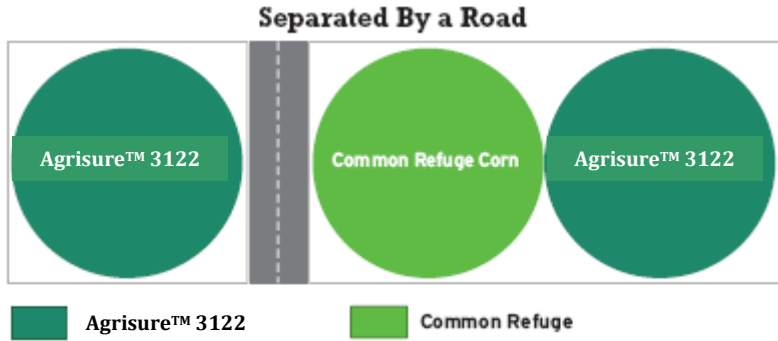
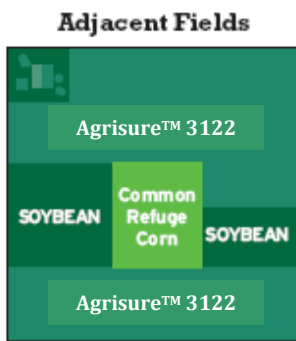
corn borer refuge must be planted with a non-Bt/lepidopteran-protected hybrid, must represent at least 5% (or 50% in cotton growing areas) of the grower's corn acres (i.e., sum of Bt11xDAS-59122-7xMIR604xTC1507 corn acres and corn borer refuge acres), and must be planted within ½ mile of the Bt11xDAS-59122-7xMIR604xTC1507 cornfield. 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 four consecutive rows wide. 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 or crop consultants).

The corn rootworm refuge must be planted with a non-Bt/corn rootworm-protected hybrid, but can be planted with Bt corn hybrids that control corn borers. The corn rootworm refuge must represent at least 5% (or 20% in cotton growing areas) of the grower's corn acres (i.e., sum of Bt11xDAS-59122-7xMIR604xTC1507 corn acres and rootworm refuge acres) and must be planted as an adjacent block, perimeter strips, or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least four consecutive rows wide. If the rootworm refuge is planted on rotated ground, then Bt11xDAS-59122-7xMIR604xTC1507 corn must also be planted on rotated ground. If the rootworm refuge is planted in continuous corn, the Bt11xDAS-59122-7xMIR604xTC1507 cornfield may be planted on either continuous or rotated land. More generally, the rootworm refuge should utilize comparable agronomic practices as the Bt11xDAS-59122-7xMIR604xTC1507 corn acres. 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 rootworm adults are present at the time of foliar applications, then the Bt11xDAS-59122-7xMIR604xTC1507 corn field must be treated in a similar manner. Pests other than adult corn rootworms can be treated on the rootworm refuge acres without treating the Bt11xDAS-59122-7xMIR604xTC1507 corn acres only if treatment occurs when adult corn rootworms are not present or if a pesticide without activity against adult corn rootworms is used. Pests on the Bt11xDAS-59122-7xMIR604xTC1507 corn acres can be treated as needed without having to treat the rootworm refuge.

Cotton-Growing* Areas Required to Plant 50% Refuge Corn

State	Counties Identified by EPA as cotton growing areas
Alabama	All Counties
Arkansas	All Counties
Florida	All Counties
Georgia	All Counties
Louisiana	All Counties
Mississippi	All Counties
Missouri	<ul style="list-style-type: none"> <li style="width: 25%;">• Dunklin <li style="width: 25%;">• New Madrid <li style="width: 25%;">• Pemiscot <li style="width: 25%;">• Stoddard <li style="width: 25%;">• Scott
North Carolina	All Counties
Oklahoma	<ul style="list-style-type: none"> <li style="width: 25%;">• Beckham <li style="width: 25%;">• Kay <li style="width: 25%;">• Tillman <li style="width: 25%;">• Washita <li style="width: 25%;">• Jackson <li style="width: 25%;">• Custer <li style="width: 25%;">• Greer <li style="width: 25%;">• Harmon <li style="width: 25%;">• Caddo <li style="width: 25%;">• Comanche <li style="width: 25%;">• Kiowa
South Carolina	All Counties
Tennessee	<ul style="list-style-type: none"> <li style="width: 25%;">• Carroll <li style="width: 25%;">• Lincoln <li style="width: 25%;">• Hardeman <li style="width: 25%;">• Hardin <li style="width: 25%;">• Haywood <li style="width: 25%;">• Fayette <li style="width: 25%;">• Shelby <li style="width: 25%;">• Tipton <li style="width: 25%;">• Chester <li style="width: 25%;">• Madison <li style="width: 25%;">• Lauderdale <li style="width: 25%;">• Dyer <li style="width: 25%;">• Lake <li style="width: 25%;">• Franklin <li style="width: 25%;">• Rutherford <li style="width: 25%;">• Gibson <li style="width: 25%;">• Crockett <li style="width: 25%;">• Obion
Texas	<p style="text-align: center;">All counties with the exception of the following:</p> <ul style="list-style-type: none"> <li style="width: 25%;">• Carson <li style="width: 25%;">• Dallam <li style="width: 25%;">• Hansford <li style="width: 25%;">• Hartley <li style="width: 25%;">• Lipscomb <li style="width: 25%;">• Moore <li style="width: 25%;">• Ochiltree <li style="width: 25%;">• Roberts <li style="width: 25%;">• Hutchinson <li style="width: 25%;">• Sherman <p style="text-align: center;">Within these exempted counties, at least a 5% refuge corn is required.</p>
Virginia	<ul style="list-style-type: none"> <li style="width: 25%;">• Dinwiddie <li style="width: 25%;">• Surrey <li style="width: 25%;">• Franklin City <li style="width: 25%;">• Northampton <li style="width: 25%;">• Greensville <li style="width: 25%;">• Southampton <li style="width: 25%;">• Isle of Wight <li style="width: 25%;">• Suffolk City <li style="width: 25%;">• Sussex

The following are schematics of common refuge deployment options:



Bt11xDAS-59122-7xMIR604xTC1507 Corn

[Alternate brand name: *Agrisure*[™] 3122]

**Plant-incorporated protectant:
Cry1Ab, Cry34Ab1, Cry35Ab1, mCry3A and Cry1F insecticidal proteins**

This product is effective in controlling corn leaf, stalk, root and ear damage caused by corn rootworms and certain lepidopteran pests.

Active Ingredients:

Bacillus thuringiensis Cry1Ab delta-endotoxin protein and the genetic material necessary for its production (via elements of vector pZO1502) in corn event Bt11 (SYN-BT011-1)..... ≤0.006392%*

Bacillus thuringiensis Cry34Ab1 delta-endotoxin protein and the genetic material necessary for its production (via elements of vector PHP17662) in corn event DAS 59122-7 (DAS-59122-7) ≤0.02162%*

Bacillus thuringiensis Cry35Ab1 delta-endotoxin protein and the genetic material necessary for its production (via elements of vector PHP17662) in corn event DAS-59122-7(DAS-59122-7) ≤0.004242%*

Bacillus thuringiensis mCry3A insecticidal protein and the genetic material necessary for its production (via elements of vector pZM26) in corn event MIR604 (SYN-IR604-8)..... ≤0.0004888%*

Bacillus thuringiensis Cry1F delta-endotoxin protein and the genetic material necessary for its production (via elements of vector PHI8999A) in corn event TC1507 (DAS-01507-1) ≤0.001071%*

Other Ingredients:

A marker protein and the genetic material necessary for its production (via plasmid insert PHI8999A and elements of vector pZO1502) in corn events TC1507 (DAS-01507-1) and Bt11 (SYN-BT011-1)..... ≤0.000837%*

A marker protein and the genetic material necessary for its production (via elements of vector pNOV1300) in corn event MIR604 (SYN-IR604-8)..... ≤0.000444%*

*Percent (wt/wt) of whole plant on a dry weight basis

ACCEPTED

JUN 10 2011

**Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. 67979-17**

[™]Trademark of a Syngenta Group Company

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

EPA Registration No. 67979-17
EPA Establishment No. 66736-NC-01

Syngenta Seeds, Inc. - Field Crops - NAFTA
P.O. Box 12257, 3054 East Cornwallis Rd.
Research Triangle Park, NC 27709

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

The subject registration will automatically expire on midnight XXXX XX, 20XX.

This plant-incorporated protectant 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.

All corn seed that contains the plant-incorporated protectant sold or distributed by Syngenta Seeds, Inc. or its distributors must be accompanied by informational material (e.g., a bag tag) indicating the registration number (67979-17) and the active ingredients, and stipulating that growers read the Grower Guide (or equivalent guidance) prior to planting the seed.

Insects Controlled or Suppressed

Field corn has been genetically transformed to produce the insecticidal proteins, Cry1Ab, Cry34Ab1, Cry35Ab1, mCry3A and Cry1F, for control or suppression of the following coleopteran and lepidopteran insects:

European corn borer (*Ostrinia nubilalis*)
Southwestern corn borer (*Diatraea grandiosella*)
Southern cornstalk borer (*Diatraea crambidoides*)
Corn earworm (*Helicoverpa zea*)
Fall armyworm (*Spodoptera frugiperda*)
Beet armyworm (*Spodoptera exigua*)
Black cutworm (*Agrotis ipsilon*)
Western bean cutworm (*Striacosta albicosta*)
Sugarcane borer (*Diatraea saccharalis*)
Lesser cornstalk borer (*Elasmopalpus lignosellus*)
Dingy Cutworm (*Feltia jaculifera*)
Common stalk borer (*Papaipema nebris*)
Western corn rootworm (*Diabrotica virgifera virgifera*)
Northern corn rootworm (*Diabrotica barberi*)

Mexican corn rootworm (*Diabrotica virgifera zea*)

Insect Resistance Management

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.

Refuge Requirements for Bt11 x DAS-59122-7 x MIR604 x TC1507 Corn

Grower agreements (also known as stewardship agreements) will specify that growers must adhere to the refuge requirements as described in the grower guide/product use guide and/or in supplements to the grower guide/product use guide.

The following information regarding commercial production of Bt11xDAS-59122-7xMIR604xTC1507 corn must be included in the Grower Guide (or equivalent). Growers must plant a refuge when using this product.

Two options for deployment of the refuge are allowed:

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 pests. The refuge area must represent at least 5% (or 50% in cotton growing areas) of the grower's corn acres (i.e., sum of Bt11xDAS-59122-7xMIR604xTC1507 corn acres and refuge acres). It must be planted as a block adjacent to the Bt11xDAS-59122-7xMIR604xTC1507 corn field, perimeter strips, or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least four consecutive rows wide. If the common refuge is planted on rotated ground, then Bt11xDAS-59122-7xMIR604xTC1507 corn must also be planted on rotated ground. If the common refuge is planted in continuous corn, the Bt11xDAS-59122-7xMIR604xTC1507 cornfield may be planted on either continuous or rotated land. 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 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 Bt11xDAS-59122-7xMIR604xTC1507 corn field 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 or crop consultants). Pests other than adult corn rootworms can be treated with an appropriate pest-labeled insecticide on the common refuge acres without treating the Bt11xDAS-59122-7xMIR604xTC1507 corn acres only if treatment occurs when adult corn rootworms are not present. Pests on the Bt11xDAS-59122-7xMIR604xTC1507 corn acres can be treated as needed without having to treat the common refuge.

The second option is planting separate refuge areas for corn borers and corn rootworms. The

corn borer refuge must be planted with a non-Bt/lepidopteran-protected hybrid, must represent at least 5% (or 50% in cotton growing areas) of the grower's corn acres (i.e., sum of Bt11xDAS-59122-7xMIR604xTC1507 corn acres and corn borer refuge acres), and must be planted within ½ mile of the Bt11xDAS-59122-7xMIR604xTC1507 cornfield. 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 four consecutive rows wide. 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 or crop consultants).

The corn rootworm refuge must be planted with a non-Bt/corn rootworm-protected hybrid, but can be planted with Bt corn hybrids that control corn borers. The corn rootworm refuge must represent at least 5% (or 20% in cotton growing areas) of the grower's corn acres (i.e., sum of Bt11xDAS-59122-7xMIR604xTC1507 corn acres and rootworm refuge acres) and must be planted as an adjacent block, perimeter strips, or in-field strips. If perimeter or in-field strips are implemented, the strips must be at least four consecutive rows wide. If the rootworm refuge is planted on rotated ground, then Bt11xDAS-59122-7xMIR604xTC1507 corn must also be planted on rotated ground. If the rootworm refuge is planted in continuous corn, the Bt11xDAS-59122-7xMIR604xTC1507 cornfield may be planted on either continuous or rotated land. More generally, the rootworm refuge should utilize comparable agronomic practices as the Bt11xDAS-59122-7xMIR604xTC1507 corn acres. 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 rootworm adults are present at the time of foliar applications, then the Bt11xDAS-59122-7xMIR604xTC1507 corn field must be treated in a similar manner. Pests other than adult corn rootworms can be treated on the rootworm refuge acres without treating the Bt11xDAS-59122-7xMIR604xTC1507 corn acres only if treatment occurs when adult corn rootworms are not present or if a pesticide without activity against adult corn rootworms is used. Pests on the Bt11xDAS-59122-7xMIR604xTC1507 corn acres can be treated as needed without having to treat the rootworm refuge.

Cotton-Growing* Areas Required to Plant 50% Refuge Corn

State	Counties Identified by EPA as cotton growing areas
Alabama	All Counties
Arkansas	All Counties
Florida	All Counties
Georgia	All Counties
Louisiana	All Counties
Mississippi	All Counties
Missouri	<ul style="list-style-type: none"> <li style="width: 25%;">• Dunklin <li style="width: 25%;">• New Madrid <li style="width: 25%;">• Pemiscot <li style="width: 25%;">• Stoddard <li style="width: 25%;">• Scott
North Carolina	All Counties
Oklahoma	<ul style="list-style-type: none"> <li style="width: 25%;">• Beckham <li style="width: 25%;">• Key <li style="width: 25%;">• Tillman <li style="width: 25%;">• Washita <li style="width: 25%;">• Jackson <li style="width: 25%;">• Custer <li style="width: 25%;">• Greer <li style="width: 25%;">• Harmon <li style="width: 25%;">• Caddo <li style="width: 25%;">• Comanche <li style="width: 25%;">• Kiowa
South Carolina	All Counties
Tennessee	<ul style="list-style-type: none"> <li style="width: 25%;">• Carroll <li style="width: 25%;">• Lincoln <li style="width: 25%;">• Hardeman <li style="width: 25%;">• Hardin <li style="width: 25%;">• Haywood <li style="width: 25%;">• Fayette <li style="width: 25%;">• Shelby <li style="width: 25%;">• Tipton <li style="width: 25%;">• Chester <li style="width: 25%;">• Madison <li style="width: 25%;">• Lauderdale <li style="width: 25%;">• Dyer <li style="width: 25%;">• Lake <li style="width: 25%;">• Franklin <li style="width: 25%;">• Rutherford <li style="width: 25%;">• Gibson <li style="width: 25%;">• Crockett <li style="width: 25%;">• Obion
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The following are schematics of common refuge deployment options:

