

65268-1

9/29/2010

111b

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

SEP 29 2010

Demetra Vlachos
Senior Regulatory Affairs Manager
Syngenta Seeds, Inc.
3054 East Cornwallis Road, P.O. Box 12257
Research Triangle Park, NC 27709-2257

Re: Syngenta Seeds, Inc.; Attribute® Insect Protected Sweet Corn
EPA Registration No. 65268-1
Amendment to convert Attribute® Insect Protected Sweet Corn from a
conditional, time-limited registration to an unconditional registration with no
expiration date
Submission dated 07/16/2010
Decision No. 437597

Dear Ms. Vlachos:

The amendment referred to above, submitted in connection with registration under Section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable only as an extension to the current conditional, time-limited registration and provided that you comply with the updated terms and conditions as described in this letter.

- 1] The subject registration will automatically expire on midnight September 30, 2015.
- 2] The subject registration will be limited to *Bacillus thuringiensis* corn Event Bt 11 with Cry 1Ab for use in sweet corn.
- 3] Submit/cite all data required for registration of your product under FIFRA § 3(c)(5) when the Agency requires registrants of similar products to submit such data.
- 4] 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.
- 5] The Agency is requiring protein expression data in terms of dry weight, as the amount of protein present in the given tissue, specifically for Bt 11 sweet corn. Tissues for which expression data must be provided include: CONCURRENCES leaf, root, pollen, seed, and whole plant. In addition, data for each of these tissues should be provided for young plants in rapid growth, during

SYMBOL	7511P	7511P	7511P				
SURNAME	GROSS	Reynolds	Gulf				
DATE	9/29/10	9/29/10	9/29/10				

Ms. Demetra Vlachos
EPA Registration No. 65268-1

flowering, and mature plants before harvest when that part of the plant is present. Data are due on or before January 31, 2012.

6] You must commit to do the following Insect Resistance Management Program:

Insect Resistance Management:

The required IRM program for *Bt* corn must have the following elements:

- 1] Requirements (except for home garden use or educational use, i.e., marketed to home gardeners or educators for use on less than 20 acres) for Syngenta to prepare and require *Bt* corn users to sign "grower agreements" that impose binding contractual obligations on the grower to comply with the refuge requirements;
- 2] Requirements regarding programs to educate growers about IRM requirements;
- 3] Requirements regarding programs to evaluate and promote growers' compliance with IRM requirements (except for home garden use or educational use, i.e., marketed to home gardeners or educators for use on less than 20 acres);
- 4] Requirements regarding programs to evaluate whether there are statistically significant and biologically relevant changes in target insect susceptibility to Cry1Ab protein in the target insects;
- 5] Requirements regarding a "remedial action plan" that contains measures Syngenta would take in the event that any field relevant insect resistance was detected as well as to report on activity under the plan to EPA;
- 6] Submit annual reports on units sold by state (units sold by county level will be made available to the Agency upon request), IRM grower agreements results, and the compliance assurance program including the education program on or before January 31st each year.
- 7] For home garden or educational use, submit annual reports on total number of estimated acres sold and the compliance assurance program including the education program on or before January 31st each year.

a. Sweet Corn Post-Harvest Requirements

Sweet corn is harvested long before field corn. Therefore, if the sweet corn stalks remaining in the field and any insects remaining in the stalks are destroyed shortly after harvest, a refuge is not needed as a part of the IRM program for sweet corn. Growers must adhere to the following types of crop destruction requirements as described in the grower guide/product use guide and/or in supplements to the grower guide/product use guide, and in the case of home gardeners on the seed packet, in seed catalogues, and on websites offering Attribute® Insect Protected Sweet Corn Hybrids for sale to home gardeners.

Ms. Demetra Vlachos
EPA Registration No. 65268-1

1. Crop destruction must occur no later than 30 days following harvest, but preferably within 14 days.

2. The allowed crop destruction methods are: rotary mowing, discing, or plow-down or (for the home garden use) by chopping up the stalks using home garden tools such as a hoe. The crop destruction methods are intended to protect against development of insect resistance

b. Grower Agreements (except for home garden use or educational use, i.e., marketed to home gardeners or educators for use on less than 20 acres)

1] Persons purchasing the *Bt* corn product must sign a grower agreement. The term "grower agreement" refers to any grower purchase contract, license agreement, or similar legal document.

2] The grower agreement and/or specific stewardship documents referenced in the grower agreement must clearly set forth the terms of the current IRM program. By signing the grower agreement, a grower must be contractually bound to comply with the requirements of the IRM program.

3] Syngenta must continue to integrate this amended registration into the current system used for its other *Bt* corn plant-incorporated protectants, which is reasonably likely to assure that persons purchasing Attribute® Insect Protected Sweet Corn will affirm annually that they are contractually bound to comply with the requirements of the IRM program.

4] Syngenta must continue to use its current grower agreement for Attribute® Insect Protected Sweet Corn. If Syngenta wishes to change any part of the grower agreement or any specific stewardship documents referenced in the grower agreement that would affect either the content of the IRM program or the legal enforceability of the provisions of the agreement relating to the IRM program, thirty (30) days prior to implementing a proposed change, Syngenta must submit to EPA the text of such changes to ensure that it is consistent with the terms and conditions of this amended registration.

5] Syngenta must continue to integrate this amended registration into the current system used for its other *Bt* corn plant-incorporated protectants, which is reasonably likely to assure that persons purchasing Attribute® Insect Protected Sweet Corn sign grower agreement(s).

6] Syngenta shall maintain records of all *Bt* corn grower agreements for a period of three years from December 31 of the year in which the agreement was signed.

7] Syngenta shall provide EPA with a report showing the number of units of its *Bt* corn seeds sold or shipped and not returned, and the number of such units that were sold to persons who have signed grower agreements. The report shall cover the time frame of the twelve-month period covering the prior August through July.

8] Syngenta must allow a review of the grower agreements and grower agreement records by

-4116

Ms. Demetra Vlachos
EPA Registration No. 65268-1

EPA or by a State pesticide regulatory agency if the State agency can demonstrate that confidential business information, including names, personal information, and grower license number, will be protected.

c. IRM Education and IRM Compliance Monitoring Programs

1] Syngenta must continue to implement and enhance (as set forth in paragraph 17 of this section) a comprehensive, ongoing IRM education program designed to convey to Attribute® Insect Protected Sweet Corn users the importance of complying with the IRM program. The program shall include information encouraging Attribute® Insect Protected Sweet Corn users to pursue optional elements of the IRM program relating to refuge configuration and proximity to Attribute® Insect Protected Sweet Corn fields. The education program shall involve the use of multiple media (e.g., face-to-face meetings, mailing written materials, EPA-reviewed language on IRM requirements on the bag or bag tag, and electronic communications such as by Internet, radio, or television commercials). Copies of the materials will be provided to EPA for its records. The program shall involve at least one written communication annually to each Attribute® Insect Protected Sweet Corn user separate from the grower technical guide. The communication shall inform the user of the current IRM requirements. Syngenta shall coordinate its education programs with educational efforts of other registrants and organizations, such as the National Corn Growers Association and state extension programs.

2] Annually, Syngenta shall revise, and expand as necessary, its education program to take into account the information collected through the compliance survey required and from other sources. The changes shall address aspects of grower compliance that are not sufficiently high.

3] Annually, each January 31st, Syngenta must provide EPA any substantive changes to its grower education activities as part of the overall IRM compliance assurance program report. Syngenta must either submit a separate report or contribute to the report from the industry working group (ABSTC).

4] Syngenta must design and implement an ongoing IRM compliance assurance program designed to evaluate the extent to which growers purchasing Attribute® Insect Protected Sweet Corn are complying with the IRM program and that takes such actions as are reasonably needed to assure that growers who have not complied with the program either do so in the future or lose their access to Syngenta corn PIP products (with the exception of home gardening or educational uses). Syngenta shall coordinate with other *Bt* corn registrants in designing and implementing its compliance assurance program and continue to integrate this registration into the current compliance assurance program used for its other *Bt* corn plant-incorporated protectants. Other required features of the program are described in paragraphs 5–22.

The following IRM Education and IRM Compliance Monitoring Programs apply to all growers who plant more than 20 acres of Bt corn:

5] Syngenta must establish and publicize a “phased compliance approach,” i.e., a guidance document that indicates how it will address instances of non-compliance with the terms of the

Ms. Demetra Vlachos
EPA Registration No. 65268-1

IRM program and general criteria for choosing among options for responding to any non-compliant growers after the first year of noncompliance. While recognizing that for reasons of difference in business practices there are needs for flexibility between different companies, Syngenta must use a consistent set of standards for responding to non-compliance. An individual grower found to be significantly out of compliance two years in a row would be denied access to Syngenta corn PIP products the next year. Additionally, seed dealers who are not fulfilling their obligations to inform/educate growers of their IRM obligations will lose their opportunity to sell Attribute® Insect Protected Sweet Corn.

6] The IRM compliance assurance program shall include an annual survey of all *Bt* sweet corn customers who purchase 5 or more bags of *Bt*11 sweet corn. The survey shall measure the degree of compliance with the IRM program, identify the response rate (e.g., the percent of *Bt* sweet corn acres covered by the responses), and consider the potential impact of non-response. An independent third party will participate in the design and implementation of the survey. Data and information derived from the annual survey will be audited by an independent third party.

- i. A third party is classified as a party other than Syngenta, the grower, or anyone else with a direct interest in IRM compliance for *Bt* corn.

7] The survey shall be designed to provide an understanding of any difficulties growers encounter in implementing IRM requirements. An analysis of the survey results must include the reasons, extent, and potential biological significance of any implementation deviations.

8] The survey shall be designed to obtain grower feedback on the usefulness of specific educational tools and initiatives.

9] Syngenta shall provide a written summary of the results of the prior year's survey (together with a description of the methodology used, and the supporting data) to EPA by January 31 of each year. Syngenta shall confer with EPA on changes to the design and content of the survey prior to its implementation.

10] Annually, Syngenta shall revise, and expand as necessary, its compliance assurance program to take into account the information collected through the compliance survey and from other sources. The changes shall address aspects of grower compliance that are not sufficiently high. Syngenta must confer with the Agency prior to adopting any changes.

11] Syngenta shall train its representatives who make on-farm visits with *Bt* corn growers to perform assessments of compliance with IRM requirements. In the event that any of these visits result in the identification of a grower who is not in compliance with the IRM program, Syngenta shall take appropriate action, consistent with its "phased compliance approach," to promote compliance.

12] Syngenta shall carry out a program for investigating legitimate "tips and complaints" that its growers are not in compliance with the IRM program. Whenever an investigation results in the identification of a grower who is not in compliance with the IRM program, Syngenta shall take

appropriate action, consistent with its "phased compliance approach."

13] If a grower, who purchases *Bt* corn for planting, was specifically identified as not being in compliance during the previous year, Syngenta shall visit with the grower and evaluate whether that the grower is in compliance with the IRM program for the current year.

14] Each registrant shall annually provide a report to EPA summarizing the activities carried out under their compliance assurance program for the prior year and the plans for the compliance assurance program during the current year. Within one month of submitting this report to EPA, the registrant will meet with EPA to discuss its findings. The report will include information regarding grower interactions (including, but not limited to, on-farm visits, verified tips and complaints, grower meetings and letters), the extent of non-compliance, corrective measures to address the non-compliance, and any follow-up actions taken. The report must inform EPA of the number of growers deemed ineligible to purchase *Bt* corn seed on the basis of continued non-compliance with the insect resistance management refuge requirements. The registrants may elect to coordinate information and report collectively the results of their compliance assurance programs.

15] Syngenta and the seed corn dealers for Syngenta must allow a review of the compliance records by EPA or by a State pesticide regulatory agency if the State agency can demonstrate that confidential business information, including the names, personal information, and grower license number of the growers will be protected.

16] Syngenta shall revise and expand its existing Compliance Assurance Program to include the following elements. Syngenta must prepare and submit by January 31, 2011, a written description of its revised Compliance Assurance Program. Syngenta may coordinate with other registrants in designing and implementing its Compliance Assurance Program.

Requirements 17-22 of this section shall not require any action by Syngenta until a total of 20,000 acres in any county and/or a combined U.S. total of 250,000 acres per year have been planted of Attribute® Insect Protected Sweet Corn.

17] Syngenta will enhance the refuge education program throughout the seed delivery channel:

- i. Ensure sales representatives, licensees, seed dealers, and growers recognize the importance of correct refuge implementation and potential consequences of failure to plant the required refuge;
- ii. Include the refuge size requirement on all *Bt* corn seed bags or bag tags. The PIP product label accepted by EPA must include how this information will be conveyed to growers via text and graphics. This requirement may be phased in over the next three growing seasons. Revised PIP product labels must be submitted by January 31, 2011, 50% implementation on the *Bt* corn seed bags or bag tags must occur by the 2012 growing season, and full implementation must occur by the 2013 growing season.

Ms. Demetra Vlachos
EPA Registration No. 65268-1

18] Syngenta will focus the majority of on-farm assessments on regions with the greatest risks for resistance:

- i. Use *Bt* corn adoption, pest pressure information, and other available information to identify regions where the risk of resistance is greatest;
- ii. Focus approximately two-thirds of on-farm assessments on these regions, with the remaining assessments conducted across other regions where the product is used.

19] Syngenta will use its available *Bt* sales records and other information to refine grower lists for on-farm assessments of their compliance with refuge requirements:

- i. Identify for potential on-farm assessment growers whose sales information indicates they have purchased the *Bt* corn product but may have purchased little or no refuge seed from Syngenta, licensee, or affiliated company.

20] Syngenta will contract with third parties to perform on-farm assessments of compliance with refuge requirements:

- i. The third-party assessors will conduct all first-time on-farm assessments as well as second-year on-farm assessments of those growers found out of compliance in a first-time assessment

21] Syngenta will annually refine the on-farm assessment program for the *Bt* corn product to reflect the adoption rate and level of refuge compliance for the product.

22] Syngenta will follow up with growers who have been found significantly out of compliance under the on-farm assessment program and are found to be back in compliance the following year:

- i. All growers found to be significantly out of compliance in a prior year will annually be sent additional refuge assistance information for a minimum of 2 years by Syngenta, a seed supplier, or a third-party assessor, after completing the assessment process.
- ii. Syngenta will conduct follow-up checks on growers found to be significantly out of compliance within 3 years after they are found to be back in compliance.
- iii. A grower found with a second incident of significant non-compliance with refuge requirements for Attribute® Insect Protected Sweet Corn within a 5-year period will be denied access to Syngenta corn PIP products in the subsequent year.

Ms. Demetra Vlachos
EPA Registration No. 65268-1

d. Insect Resistance Monitoring and Remedial Action Plan

The Agency is imposing the following conditions for the Cry1Ab toxin expressed in this product:

Syngenta will monitor for resistance to its lepidopteran-resistant *Bt* corn. The monitoring program shall consist of two approaches: (1) focused population sampling and laboratory testing; and (2) investigation of reports of less-than expected control of labeled insects. Should field-relevant resistance be confirmed, an appropriate resistance management action plan will be implemented.

(1) Focused Population Sampling

Syngenta will develop and ensure the implementation of a plan for resistance monitoring for *Spodopreria frugiperda* (fall armyworm or FAW) in counties in which Cry1Ab sweet corn acreage exceeds 5,000 acres and the pest is capable of overwintering in that county. Syngenta should consult with academic and USDA experts in developing the monitoring plan and will provide EPA with a copy of its proposed resistance monitoring plan for EPA's approval prior to implementation. This proposed FAW monitoring plan must be submitted to EPA by January 31 of the year following that in which Cry 1Ab sweet corn acreage exceeds the trigger specified in this requirement (i.e. greater than 5,000 acres in any county in which FAW overwinters). The proposed plan must be implemented the season following the acreage trigger being met. The proposed plan will remain in place until an EPA approved plan can be implemented.

Syngenta shall annually sample and bioassay populations of the key target pests *Ostrinia nubilalis* (European corn borer; ECB) and *Helicoverpa zea* (corn earworm; CEW). Sampling for the target pests will be focused in areas identified as those with the highest risk of resistance development (e.g., where lepidopteran-active *Bt* hybrids are planted on a high proportion of the corn acres, and where the insect species are regarded as key pests of corn). Bioassay methods must be appropriate for the goal of detecting field-relevant shifts in population response to lepidopteran resistant *Bt* corn and/or changes in resistance allele frequency in response to the use of *Bt* corn and, as far as possible, should be consistent across sampling years to enable comparisons with historical data.

The number of populations to be collected shall reflect the regional importance of the insect species as a pest, and specific collection regions will be identified for each pest. For ECB, a minimum of 12 populations across the sampling region will be targeted for collection at each annual sampling. For CEW, the target will be a minimum of 10 populations. Pest populations should be collected from multiple corn-growing states reflective of different geographies and agronomic conditions. To obtain sufficient sensitivity to detect resistance alleles before they become common enough to cause measurable field damage, each population collection shall attempt to target 400 insect genomes (egg masses, larvae, mated females, and/or mixed-sex adults), but a successful population collection will contain a minimum of 100 genomes. It is recognized that it may not be possible to collect the target number of insect populations or genomes due to factors such as natural fluctuations in pest density, environmental conditions, and area-wide pest suppression.

Ms. Demetra Vlachos
EPA Registration No. 65268-1

The sampling program and geographic range of collections may be modified as appropriate based on changes in pest importance and for the adoption levels of lepidopteran-resistant *Bt* corn. The Agency shall be consulted prior to the implementation of such modifications.

Syngenta will report to the Agency before August 31 each year the results of the population sampling and bioassay monitoring program.

Any incidence of unusually low sensitivity to the *Bt* protein in bioassays shall be investigated as soon as possible to understand any field relevance of such a finding. Such investigations shall proceed in a stepwise manner until the field relevance can be either confirmed or refuted, and results of these shall be reported to the Agency annually before August 31. The investigative steps will include:

1. Re-test progeny of the collected population to determine whether the unusual bioassay response is reproducible and heritable. If it is not reproducible and heritable, no further action is required.
2. If the unusual response is reproducible and heritable, progeny of insects that survive the diagnostic concentration will be tested using methods that are representative of exposure to *Bt* corn hybrids under field conditions. If progeny do not survive to adulthood, any suspected resistance is not field relevant and no further action is required.
3. If insects survive steps 1 and 2, resistance is confirmed, and further steps will be taken to evaluate the resistance. These steps may include:
 - determining the nature of the resistance (*i.e.*, recessive or dominant, and the level of functional dominance);
 - estimating the resistance-allele frequency in the original population;
 - determining whether the resistance-allele Frequency is increasing by analyzing field collections in subsequent years sampled from the same site where the resistance allele(s) was originally collected;
 - determining the geographic distribution of the resistance allele by analyzing field collections in subsequent years from sites surrounding the site where the resistance allele(s) was originally collected.

Should field-relevant resistance be confirmed, and the resistance appears to be increasing or spreading, Syngenta will consult with the Agency to develop and implement a case-specific resistance management action plan.

(2) Investigation of Reports of Unexpected Levels of Damage by the Target Pests:

Syngenta will follow up on grower, extension specialist or consultant reports of unexpected levels of damage by the lepidopteran pests listed on the pesticide label. Syngenta will instruct its customers to contact them if such incidents occur. Syngenta will investigate all legitimate reports submitted to the company or the company's representatives.

If reports of unexpected levels of damage lead to the suspicion of resistance in any of the key target pests (ECB, SWCB, CEW, and FAW), Syngenta will implement the actions described below, based on the following definitions of *suspected resistance* and *confirmed resistance*.

Suspected resistance

EPA defines *suspected resistance* to mean field reports of unexpected levels of insect feeding damage for which:

- the corn in question has been confirmed to be lepidopteran-active *Bt* corn;
- the seed used had the proper percentage of corn expressing *Bt* protein;
- the relevant plant tissues are expressing the expected level of *Bt* protein; and
- it has been ruled out that species not susceptible to the protein could be responsible for the damage, that no climatic or cultural reasons could be responsible for the damage, and that there could be no other reasonable causes for the damage.

The Agency does not interpret *suspected resistance* to mean grower reports of possible control failures or suspicious results from annual insect monitoring assays, nor does the Agency intend that extensive field studies and testing be undertaken to confirm scientifically the presence of insects resistant to *Bt* corn in commercial production fields before responsive measures are undertaken.

If resistance is *suspected*, Syngenta will instruct growers to do the following:

- Use alternative control measures in the *Bt* corn fields in the affected region to control the target pest during the immediate growing season.
- Destroy *Bt* corn crop residues in the affected region within one month after harvest with a technique appropriate for local production practices to minimize the possibility of resistant insects over-wintering and contributing to the next season's target pest population.

Additionally, if possible, and prior to the application of alternative control measures or destruction of crop residue, Syngenta will collect samples of the insect population in the affected

Ms. Demetra Vlachos
EPA Registration No. 65268-1

fields for laboratory rearing and testing. Such rearing and testing shall be conducted as expeditiously as practical.

Confirmed resistance

EPA defines *confirmed resistance* to mean, in the case of field reports of unexpected levels of damage from the key target pests, that all the following criteria are met:

- There is >30% insect survival and commensurate insect feeding in a bioassay, initiated with neonate larvae, that uses methods that are representative of exposure to *Bt* corn hybrids under field conditions (ECB only).
- In standardized laboratory bioassays using diagnostic concentrations of the *Bt* protein suited to the target pest in question, the pest exhibits resistance that has a genetic basis and the level of survivorship indicates that there may be a resistance allele frequency of ≥ 0.1 in the sampled population.
- In standardized laboratory bioassays, the LC_{50} exceeds the upper limit of the 95% confidence interval of the LC_{50} for susceptible populations surveyed both in the original baselines developed for this pest species and in previous years of field monitoring.

(3) Response to Confirmed Resistance in a Key Target Pest as the Cause of Unexpected Levels of Damage in the Field

When field resistance is *confirmed* (as defined above), the following steps will be taken by Syngenta:

- EPA will receive notification within 30 days of resistance confirmation;
- Affected customers and extension agents will be notified about confirmed resistance within 30 days;
- Monitoring will be increased in the affected area and local target pest populations will be sampled annually to determine the extent and impact of resistance;
- If appropriate (depending on the resistant pest species, the extent of resistance, the timing of resistance, and the nature of resistance, and the availability of suitable alternative control measures), alternative control measures will be employed to reduce or control target pest populations in the affected area. Alternative control measures may include advising customers and extension agents in the affected area to incorporate crop residues into the soil following harvest to minimize the possibility of over-wintering insects, and/or applications of chemical insecticides;
- Unless otherwise agreed with EPA, stop sale and distribution of the relevant lepidopteran-active *Bt* corn hybrids in the affected area immediately until an effective

local mitigation plan approved by EPA has been implemented;

- Syngenta will develop a case-specific resistance management action plan within 90 days according to the characteristics of the resistance event and local agronomic needs. Syngenta will consult with appropriate stakeholders in the development of the action plan, and the details of such a plan shall be approved by EPA prior to implementation;
- Notify affected parties (e.g. growers, consultants, extension agents, seed distributors, university cooperators and state/federal authorities as appropriate) in the region of the resistance situation and approved action plan; and
- In subsequent growing seasons, maintain sales suspension and alternative resistance management strategies in the affected region(s) for the *Bt* corn hybrids that are affected by the resistant population until an EPA-approved local resistance management plan is in place to mitigate the resistance.

A report on results of resistance monitoring and investigations of damage reports must be submitted to the Agency annually by August 31st each year for the duration of the conditional registration.


e. Annual Reports

- 1] Annual Sales: reported and summed by state (county level data available by request), January 31st each year;
- 2] Grower Agreement: number of units of Bt corn seeds shipped or sold and not returned, and the number of such units that were sold to persons who have signed grower agreements, January 31st each year;
- 3] Grower Education: substantive changes to education program completed the previous year, January 31st each year;
- 4] Compliance Assurance Plan: Compliance Assurance Program activities and results, January 31st each year;
- 5] Compliance: to include annual survey results and plans for the next year; full report January 31st each year;
- 6] Insect Resistance Monitoring Results: results of monitoring and investigations of damage reports, August 31st each year.

Ms. Demetra Vlachos
EPA Registration No. 65268-1

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of this product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

Sincerely,



Sheryl K. Reilly, Ph.D., Chief
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)

ATTRIBUTE® INSECT PROTECTED SWEET CORN

Bt Protein
Plant-Incorporated Protectant Active Ingredient
for the Control of European Corn Borer and Corn Earworm
in Sweet Corn

(Pure form of the plant-incorporated protectant
Bacillus thuringiensis Cry1Ab delta-endotoxin protein produced in corn cells)

Active Ingredient:

Bacillus thuringiensis Cry1Ab delta-endotoxin and the genetic material (via elements of vector pZO1502) necessary for its production in corn (SYN-BTØ11-1) 0.0002 - 0.0003% by seed weight

Inert Ingredient:

Substance produced by a marker gene and its controlling sequences in corn (SYN-BTØ11-1)..... < 0.00004% by seed weight

ACCEPTED

SEP 29 2010

Keep Out of the Reach of Children

CAUTION

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 65268-1

EPA Reg. No. 65268-1
EPA Est. No.

Syngenta Seeds, Inc. – Vegetables – NAFTA
3054 East Cornwallis Road
P. O. Box 12257
Research Triangle Park, NC, USA 27709-2257

15116

Directions for Use:

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

Corn has been genetically modified to produce a *Bacillus thuringiensis* Cry1Ab delta-endotoxin protein for control of certain lepidopteran pests. In sweet corn, this insecticidal protein can provide significant control of:

European corn borer	(<i>Ostrinia nubilalis</i>)
Corn earworm	(<i>Helicoverpa zea</i>)

In addition, some control or suppression of the following corn pest can be provided:

Fall armyworm	(<i>Spodoptera frugiperda</i>)
---------------	----------------------------------

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 plant-incorporated protectants to produce inbred corn lines and hybrid corn varieties with combined pesticidal traits.

All commercial corn seed that contains the plant-incorporated protectant that is sold or distributed by Syngenta Seeds, Inc. or its distributors must be accompanied by informational material stipulating that growers read the Grower Guide (or equivalent guidance) prior to planting the seed. This informational material will also include the following statements (to be modified as warranted by changes in the regulatory status of glufosinate ammonium herbicide use on tolerant sweet corn): "Attribute® Insect Protected Sweet Corn hybrids produce a protein that increases tolerance to glufosinate ammonium herbicides. Glufosinate ammonium is not registered or recommended for use on this hybrid. If you plant a glufosinate resistant crop in the next growing season, please note that volunteer plants from this sweet corn hybrid may not be controlled by a glufosinate ammonium herbicide."

A Grower Guide or equivalent guidance must be distributed to all customers, with the exception of home garden users, using seed containing the plant-incorporated protectant that will include instructions and recommendations regarding product use, insect resistance management, and integrated pest management. The following information regarding commercial production must be included in the Grower Guide or equivalent guidance:

- Crop destruction must occur no later than 30 days following harvest.
- The allowed crop destruction methods are: rotary mowing, disking, or plow-down. Crop destruction methods should destroy any surviving resistant insects.

16/11/16

For home garden or educational use, the following informational material will be on individual seed packets.

- This seed is for home garden and/or educational use only (total Attribute sweet corn planted must be less than 20 acres).
- Within 14 days of harvesting ears of corn, corn plants must be chopped with a hoe or other garden tool to ensure that sweet corn insect pests do not develop resistance to this product.

In addition, IRM educational information will be available in seed catalogues and on websites offering Attribute® Insect Protected Sweet Corn Hybrids for sale to home gardeners.