



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

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

September 28, 2015

Jamie Staley  
U.S. Registration Manager  
Pioneer Hi-Bred International, Inc.  
7100 NW 62<sup>nd</sup> Avenue  
Johnston, IA 50131

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling and Formulation Amendment – To extend the expiration date, update the primary brand name, correct the ingredient statement and confidential statement of formula (CSF) and make other minor label revisions  
Product Name: Optimum<sup>®</sup> AcreMax<sup>®</sup> 1  
EPA Registration Number: 29964-6  
Application Date: June 26, 2015  
OPP Decision Number: 509317

Dear Mr. Staley:

The amended labeling and Confidential Statement of Formula (CSF) dated June 26, 2015, 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, are 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.

Please note that the record for this product currently contains the following acceptable CSF:

- Basic CSF dated 06/26/2015

Any CSFs other than that listed above are superseded/no longer valid.

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](mailto:sibold.ann@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'Alan Reynolds', with a stylized flourish at the end.

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

Enclosure

# Optimum<sup>®</sup> AcreMax<sup>®</sup> 1

## Active Ingredients of Component 1 (Herculex<sup>®</sup>\* XTRA): $\leq 90\%$ of maize kernels

*Bacillus thuringiensis* Cry1F protein and the genetic material (plasmid insert PHI8999A) necessary for its production in corn event DAS-Ø15Ø7-1 ..... $\leq 0.00174^{**}$

*Bacillus thuringiensis* Cry34Ab1 protein and the genetic material (PHP17662 T-DNA) necessary for its production in corn event DAS-59122-7 ..... $\leq 0.01684^{**}$

*Bacillus thuringiensis* Cry35Ab1 protein and the genetic material (PHP17662 T-DNA) necessary for its production in corn event DAS-59122-7 ..... $\leq 0.00676^{**}$

### Other Ingredients:

Phosphinothricin acetyltransferase (PAT) protein and the genetic material (plasmid insert PHI8999A and PHP17662 T-DNA) necessary for its production in corn events DAS-Ø15Ø7-1 and DAS-59122-7 ..... $\leq 0.00151\%^{**}$

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## Active Ingredient of Component 2 (Herculex<sup>®</sup>\* I): $\geq 10\%$ of maize kernels

*Bacillus thuringiensis* Cry1F protein and the genetic material (plasmid insert PHI8999A) necessary for its production in corn event DAS-Ø15Ø7-1 ..... $\leq 0.00027\%^{**}$

### Other Ingredients:

Phosphinothricin acetyltransferase (PAT) protein and the genetic material (plasmid insert PHI8999A) necessary for its production in corn event DAS-Ø15Ø7-1 ..... $\leq 0.0020\%^{**}$

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\*\* % total protein on a dry wt. basis as expressed in whole plant tissue

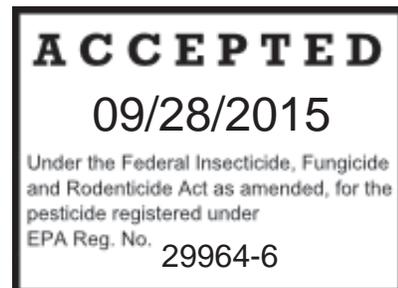
**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

NET CONTENTS \_\_\_\_\_

EPA REGISTRATION NUMBER: 29964-6

EPA ESTABLISHMENT NUMBER: 029964-IA-001  
Pioneer Hi-Bred International, Inc.  
7300 NW 62 Avenue  
Johnston, IA 50131



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\* Herculex<sup>®</sup> Insect Protection technology by Dow AgroSciences and Pioneer Hi-Bred. Herculex<sup>®</sup> is a registered trademark of Dow AgroSciences LLC.

## **DIRECTIONS FOR USE**

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

The plant-incorporated protectant must be used as specified in the terms and conditions of the registration.

Optimum<sup>®</sup> AcreMax<sup>®</sup>1 (OAM1) consists up to 90% Herculex<sup>®</sup> XTRA seed and a minimum of 10% Herculex<sup>®</sup> I seed blended together in a bag of seed. This product controls above- and below-ground pests of maize.

## **INSECT RESISTANCE MANAGEMENT**

In order to minimize the risk of corn pests developing resistance to OAM1 corn, an insect resistance management plan must be implemented.

Seed bags or bag tags will prominently display the refuge size requirements using graphics accompanied by text. For seed distributed outside cotton-growing areas the information will indicate that the product requires a 20% structured refuge lepidopteran pests, and for seed distributed within cotton-growing areas the information will indicate that the product requires a 50% structured refuge for lepidopteran pests.

OAM1 contains a “built-in” 10% corn rootworm refuge by virtue of the blended refuge seed in the bag. No further corn rootworm refuge is required to minimize the risk of corn rootworm developing resistance.

**The use of OAM1 corn does require a separate structured lepidopteran refuge.**

### **Corn-Belt/Non-Cotton Growing Areas**

OAM1 grown outside cotton-growing areas (e.g., the Corn Belt), growers must adhere to the following refuge requirements:

- Growers must plant a structured refuge of at least 20% non-*Bt* corn and/or non-lepidopteran resistant *Bt* corn which may be treated with insecticides as needed to control lepidopteran stalk-boring and other pests.
- Refuge planting options include: separate fields, blocks within fields (e.g., along the edges or headlands), and strips across the field.
- External refuges must be planted within 1/2 mile.
- When planting the refuge in strips across the field, refuges must be at least four (4) consecutive crop rows wide.
- Insecticide treatments for control of European corn borer, corn earworm, southwestern corn borer, fall armyworm, black cutworm, western bean cutworm, lesser corn stalk borer, southern corn stalk borer, and sugarcane borer 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, crop consultants). Microbial *Bt* insecticides must not be applied to non-*Bt* corn and/or non-lepidopteran resistant *Bt* corn refuges.

### **Cotton-Growing Areas**

OAM1 grown in cotton-growing areas, growers must adhere to the following refuge requirements:

- Growers must plant a structured refuge of 50% non-*Bt* corn and/or non-lepidopteran resistant *Bt* corn that may be treated with insecticides as needed to control lepidopteran stalk-boring and other pests.
- Refuge planting options include: separate fields, blocks within fields (e.g., along the edges or headlands), and strips across the field.

- External refuges must be planted within 1/2 mile.
- When planting the refuge in strips across the field, refuges must be at least four (4) consecutive crop rows wide.
- Insecticide treatments for control of European corn borer, corn earworm, southwestern corn borer, fall armyworm, black cutworm, western bean cutworm, lesser corn stalk borer, southern corn stalk borer, and sugarcane borer 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, crop consultants). Microbial *Bt* insecticides must not be applied to non-*Bt* corn and/or non-lepidopteran resistant *Bt* corn refuges.
- 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).

**Use Pattern**

<b>Crop</b>	<b>Pests</b>
Field corn	black cutworm corn earworm European corn borer fall armyworm lesser corn stalk borer southern corn stalk borer southwestern corn borer sugarcane borer western bean cutworm  western corn rootworm northern corn rootworm Mexican corn rootworm

Herculex<sup>®</sup> Insect Protection technology by Dow AgroSciences and Pioneer Hi-Bred offers unique genetic characteristics for specific grower needs and may be protected by one or more of the following U.S. patents: 5,484,956; 5,489,520; 5,510,474; 5,550,318; 5,919,675; 6,020,190; 6,218,188; 6,258,999; 6,573,240; 6,737,273; 6,943,282; 6,083,499; 6,127,180; 6,340,593; 6,548,291; 6,624,145; and 6,893,872.