This Product Use Guide sets forth the requirements for growing cotton containing WideStrike® Insect Protection and WideStrike 3 Insect Protection, including Insect Resistance Management (IRM) practices.

Cotton containing WideStrike® Insect Protection and WideStrike 3 Insect Protection is protected under one or more U.S. patents. You must have a valid, executed Technology Use Agreement on file with Dow AgroSciences to legally obtain, plant and grow varieties that contain Bacillus thuringiensis (Bt) cotton technology from Dow AgroSciences. Failure to comply with the terms of the Technology Use Agreement or the Product Use Guide could result in your forfeiting the privilege to grow Dow AgroSciences Bt cotton and potential legal liability. You must communicate all applicable requirements and restrictions on your Bt cotton to all persons growing, possessing or taking an interest in your Bt cotton.

A Technology Use Agreement may be signed electronically online at www.agcelerate.com. For additional information, visit www.traitstewardship.com, call 877-4-TRAITS (877-487-2487) or contact your seed provider. Signing a Technology Use Agreement with Dow AgroSciences entitles you to receive the most current Product Use Guide and other periodic updates relating to Bt cotton. If you are growing Enlist™ cotton, it is important that you also read and follow the Enlist Product Use Guide for additional requirements specific to the Enlist weed control system.

REFUGE REQUIREMENTS FOR WIDESTRIKE® AND WIDESTRIKE 3

![Map showing refuge requirements for WideStrike® and WideStrike 3 Insect Protection](image)

- No structured refuge required for WideStrike® Insect Protection and WideStrike 3 Insect Protection
- Refuge required/pink bollworm eradication in western regions
- No Bt cotton allowed

1 Check with local authorities about the status/requirements of any pink bollworm eradication program in your area.
REFUGE OPTIONS

OPTION 1: Embedded Refuge
At least one row of non-\(Bt\) refuge cotton must be planted for every six to 10 rows of \(Bt\) cotton. The refuge may be treated with sterile insects, any insecticide (except \(Bt\) foliar spray products) or pheromones labeled for the control of pink bollworm, but only if the entire field is similarly treated. The in-field refuge rows must not be treated independently of the surrounding \(Bt\) cotton field in which they are embedded, and the refuge rows must be managed identically to the \(Bt\) cotton rows. One way the interspersed rows can be planted is by putting the non-\(Bt\) cotton variety in one hopper on the seed planter and \(Bt\) cottonseed in the remaining hoppers. The interspersed refuge approach is not allowed outside the western Cotton Belt.

OPTION 2: 5% Unsprayed Refuge
For a 5 percent unsprayed refuge, you may plant up to 95 percent of your cotton acres with \(Bt\) cotton. You must plant at least 5 percent of your cotton acres with non-\(Bt\) cotton. If you plant more than one brand of \(Bt\) cotton, you must ensure that at least 5 percent of your total cotton acres are planted with non-\(Bt\) cotton in accordance with these refuge requirements.

The unsprayed refuge should preferably be placed within \(\frac{1}{4}\) mile or closer of the associated \(Bt\) cotton fields but cannot be located farther than \(\frac{1}{2}\) mile from the associated \(Bt\) fields. The 5 percent unsprayed refuge should preferably average at least 300 feet in width but cannot average less than 150 feet in width.
The unsprayed refuge cotton must not be treated with any insecticide that is labeled for control of tobacco budworm, cotton bollworm or pink bollworm. At the presquaring cotton stage only, the refuge may be treated with any lepidopteran insecticide to control foliage-feeding caterpillars. Insecticide products containing the following active ingredients cannot be sprayed on the refuge under the unsprayed refuge option: foliar Bt products, "acephate (> 0.5 lb. a.i./A), amitraz, emamectin benzoate, endosulfan, indoxacarb, methomyl, methoxyfenozide, methyl parathion (> 0.5 lb. a.i./A), profenofos, pyrethroids, spinosad, sulprofos, thiodicarb, Helicoverpa zea nuclear polyhedrosis virus or gossypylure.

If the unsprayed refuge is to be planted in the same field as the Bt cotton, the unsprayed refuge cotton must be planted in a continuous block and no Bt cotton may be planted within such block.

OPTION 3: 20% Sprayed Refuge

For a 20 percent sprayed refuge, you may plant up to 80 percent of your cotton acres with Bt cotton. You must plant at least 20 percent of your cotton acres with non-Bt cotton. If you plant more than one brand of Bt cotton, you must ensure that at least 20 percent of your total cotton acres are planted with non-Bt cotton in accordance with these refuge requirements.

The sprayed refuge preferably should be placed within ½ mile or closer of the associated Bt cotton fields but cannot be located farther than 1 mile from the associated Bt cotton fields.

If the lepidopteran pest population in the 20 percent refuge exceeds the economic threshold, the 20 percent refuge may be sprayed with any insecticides, except Bt foliar sprays, to manage the pest population. Pests not targeted by Bt cotton can be managed as needed in the non-Bt refuge and in the Bt cotton.

IRM TIPS LINE

Bt cottonseed companies are required by the U.S. Environmental Protection Agency (EPA) to establish a system to collect information about alleged instances of noncompliance with the IRM requirements. If you have a tip or complaint, please call the Dow AgroSciences toll-free IRM Tips & Complaints phone line at 877-4-TRAITS (877-487-2487).

*Use of insecticides with active ingredients other than those listed above, which provide significant control of lepidopteran insects, are subject to these same restrictions on use.
MANAGEMENT FOR WIDESTRIKE® AND WIDESTRIKE 3

WideStrike® Insect Protection and WideStrike 3 contain Bt proteins that provide protection from feeding by several lepidopteran pests, including tobacco budworm and bollworm. Under heavy pest pressure, feeding damage may occur to the Bt cotton plants. WideStrike and WideStrike 3 fields should be regularly scouted for pest feeding, and insecticide treatments should be used if local economic thresholds are reached.

INSECT RESISTANCE MANAGEMENT

Insect Resistance Management (IRM) is mandated by the U.S. Environmental Protection Agency (EPA) and is the responsibility of each person growing and using Bt cotton protection technology. Properly managing Bt cotton technology is essential to preserving it as a useful crop protection tool for years to come. Failure to implement IRM plans may lead to adaptation by the target pest populations to the Bt insecticidal proteins and loss of efficacy of the product.

A key element in IRM is the use of a refuge. Within this refuge, certain target insects survive without exposure to Bt insecticidal proteins. This ensures sufficient target insects susceptible to Bt insecticidal proteins are nearby to mate with any rare insects naturally resistant to Bt proteins that may emerge from your Bt cotton fields. Susceptibility to Bt proteins is then passed on to their offspring.

Natural refuges provided by host crops and wild plants other than cotton are sufficient to manage resistance in most of the central and eastern cotton-growing regions. You are not required to plant a structured refuge for cotton containing WideStrike or WideStrike® 3 Insect Protection in the following states: Alabama, Arkansas, Florida, Georgia, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas (excluding the following counties: Brewster, Crane, Crockett, Culberson, El Paso, Hudspeth, Jeff Davis, Loving, Pecos, Presidio, Reeves, Terrell, Val Verde, Ward and Winkler) and Virginia.

Unless otherwise allowed by special local use needs (e.g., pink bollworm eradication in Arizona; please consult your local Extension service agent), you must plant a structured refuge consisting of non-Bt cotton to accompany your Bt cotton acreage if you farm in the western region of Arizona, California, New Mexico and the following Texas counties: Brewster, Crane, Crockett, Culberson, El Paso, Hudspeth, Jeff Davis, Loving, Pecos, Presidio, Reeves, Terrell, Val Verde, Ward and Winkler.

In this western region, you must keep accurate records of where you plant all your Bt and non-Bt cotton (including the location and acreage of each type and variety of all Bt and non-Bt cotton you plant) so your Bt crops can be readily identified and your refuge areas verified. These records must be made available to Dow AgroSciences upon request.

The following is important information about how to implement an IRM plan for Bt cotton in the western region.

REQUIREMENTS FOR REFUGE IN THE WESTERN REGION

The non-Bt cotton varieties planted in your refuge must be agronomically similar (particularly plant maturity group) to the associated Bt cotton varieties planted. Additionally, the refuge must be managed the same as the associated cotton varieties containing WideStrike Insect Protection and WideStrike 3 Insect Protection (e.g., planting time, irrigation, fertilizer, weed control, management of other pests and harvest).

It is recommended that all seed hoppers be thoroughly cleaned out when switching from planting the Bt cotton fields and the non-Bt cotton refuge fields to avoid inadvertently mixing Bt and non-Bt seed.

If you observe unexpected target pest feeding damage to your fields planted with WideStrike® Insect Protection or WideStrike 3 Insect Protection, you should immediately contact your seed provider, sales representative or Dow AgroSciences at 877-4-TRAITS (877-487-2487).
HERBICIDE TOLERANCE

Some Bt cotton varieties are available with the Enlist™ trait and/or Genuity® Roundup Ready® Flex herbicide-tolerant trait, making them tolerant to over-the-top applications of Enlist Duo™, Enlist One™, glufosinate - ammonium and/or glyphosate herbicides.

Verify the weed control system before making over-the-top herbicide applications. Always read and follow label directions. Use of a herbicide over the top of a cotton variety that does not contain the tolerant trait for that herbicide used will cause crop damage.

RESTRICTED PLANTING LOCATIONS

a) No planting of Bt cotton is permitted south of Route 60 (near Tampa) in Florida.

b) Commercial culture of Bt cotton is prohibited in Hawaii, Puerto Rico and the U.S. Virgin Islands.

MARKETING STEWARDSHIP

Dow AgroSciences is a member of Excellence Through Stewardship® (ETS). Dow AgroSciences’ products are commercialized in accordance with ETS product launch stewardship guidance and Dow AgroSciences’ Product Launch Stewardship Policy.

Before selecting varieties for your crop plan, Dow AgroSciences recommends you know and understand whether the variety you have chosen is a conventional variety, one approved for export or one not yet approved for export. It is important that you consult your trait provider’s technical agreements prior to planting to understand crop requirements and approved cotton markets.

Any grain or material produced from Bt seed can only be exported to or used in, processed in or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotechnology traits across boundaries into nations where import is not permitted. Talk to your grain handler or purchaser in advance to facilitate appropriate crop, grain or material handling and marketing.

For further information about your crop or grain marketing options, contact Dow AgroSciences at 877-4-TRAITS (877-487-2487). Information regarding the regulatory and market status of agricultural biotechnology products can be found at: www.biotradestatus.com.