

REFUGE PLANTING FOR

INSECT RESISTANCE MANAGEMENT

Planting the proper refuge is critical when refuge in a bag is not available.

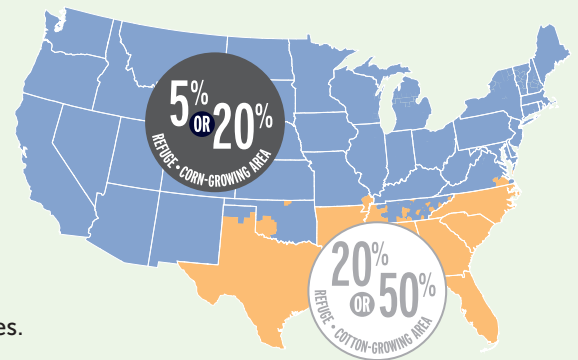
STEP 1

REFUGE SIZE Plant the **CORRECT** size refuge for the area and corn product.

- The Corn-Growing Area
 - 5% or 20%, structured refuge required
- The Cotton-Growing Area
 - 20% or 50%, structured refuge required

Refer to IRM Grower/Product guide.

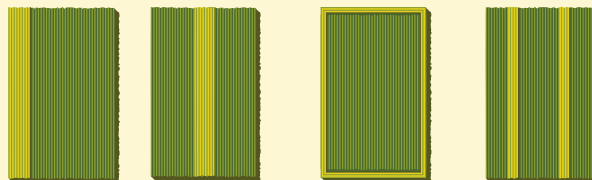
SEE PAGE 2 for instructions on correctly calculating your refuge acres.



STEP 2

REFUGE LOCATION Plant the required refuge within each field that contains *B.t.* insect-protected corn.

Refuge should always be a minimum of four rows wide.



1/2-mile option refuge may be available for select products*

STRIP REFUGE (Split Planter) For strip refuges, use the outside two planter boxes on one side of your planter. By doing this, you will be planting four contiguous rows on your return trip.



STEP 3

REFUGE PLANTING In each field, plant your refuge first before planting any insect-protected corn. This will ensure that the minimum refuge size requirement is met should unforeseen circumstances (i.e., adverse weather) alter your planting schedule and strategy.

Use a refuge product that contains no *B.t.* insect-protection traits.

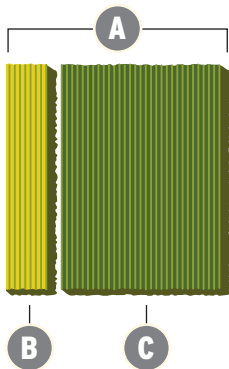
STEP 4

TREATMENT If you need to treat your refuge with a non-*B.t.* foliar insecticide, you may need to treat the *B.t.* product technology in a similar manner.

*Provided as a summary only. Growers must read the seed company IRM Grower/Product Guide prior to planting for important information on planting and insect resistance management.

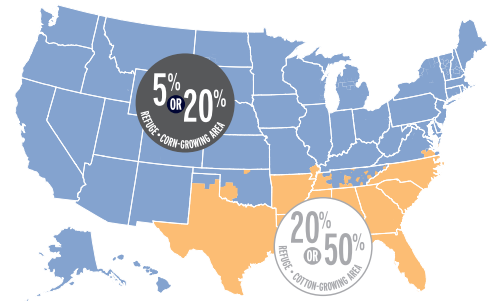
CALCULATING IRM COMPLIANCE

STRUCTURED REFUGE



Refer to this diagram for the examples below.

- A** Total Corn Acres*
 - B** Refuge Acres
 - C** *B.t.* Acres
 - %** Percent of Required Refuge— 5% 20% or 50%
- Based on total corn acres



*Includes all corn acres that are infield or adjacent to each other and will be allocated to the *B.t.* product and its associated refuge.

The **WRONG WAY** to calculate Example shown is for a 20% refuge product.

Do **NOT** multiply the amount of *B.t.* acres or seed by the percent of refuge required.

This is **NOT** the correct minimum refuge size.

Example **C** 160 x **%** 20% = **B** ~~32~~

The **CORRECT WAY** to calculate Example shown is for a 20% refuge product.

START with the **TOTAL** number of corn acres you want to plant in an area.

Multiply by the **PERCENT** of refuge required for the *B.t.* trait.

This is your minimum **REFUGE ACRES.**

Example **A** 200 x **%** 20% = **B** 40 ✓

Your Field x =

Next, subtract your refuge acres from your total corn acres.

This is your maximum ***B.t.* ACRES.**

Example **A** 200 - **B** 40 = **C** 160

Your Field - =



DOWNLOAD A FREE

Insect Resistance Management (IRM) corn refuge calculator at www.irmcalculator.com or by scanning this QR code.



Before opening a bag of seed, be sure to read, understand and accept the stewardship requirements, **including applicable refuge requirements for insect resistance management**, for the biotechnology traits expressed in the seed as set forth in the Monsanto Technology/Stewardship Agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply with the most recent stewardship requirements.

