

SIMPLIFY ACHIEVING HIGHER WHOLE-FARM YIELD POTENTIAL

SITUATION

Producers who plant insect-traited corn are required to manage refuges to preserve *Bt* technology. With so many trait options, following refuge management guidelines has become more complicated. Dow AgroSciences Refuge Advanced[®] powered by SmartStax[®] available in Mycogen[®] brand hybrids simplifies achieving higher whole-farm yield potential by making refuge management easier. Refuge Advanced ensures refuge compliance in the Corn Belt¹ with a blend of 95 percent SmartStax seeds and 5 percent non-insect-traited refuge seeds in one bag.

FACTORS TO CONSIDER

- Insect pressure in the area
- Trait packages planted on-farm
- Hybrids required to meet refuge guidelines
- Planning your refuge acres
- Planting the refuge correctly
- Potential yield advantage from reduced refuge

ACTION PLAN

- 1. Determine crop plan.** Planning for a new crop season can be time-consuming. Refuge Advanced reduces the number of steps growers need to take to maximize whole-farm yield potential, makes planning easier, and simplifies record-keeping for farm management and compliance reporting. Save time with Refuge Advanced by not having to clean out seed in planter boxes, handle insecticide boxes or plant a separate refuge.
- 2. Select hybrids.** Select the best genetics that meet the agronomic needs of your fields and combine that with the best trait package to maximize yield potential and protect against yield-robbing insects. With Refuge Advanced, there is no need to purchase additional refuge hybrids. Additionally, the refuge hybrid in the bag was selected to match key agronomic characteristics of the SmartStax hybrid it is blended with.
- 3. Consider agronomic factors.** A proprietary blending process ensures that refuge seed and SmartStax seed are evenly distributed in the bag and, therefore, in the field. Consistent blending prevents formation of “hot spots,” or large clusters of refuge plants in one area. The refuge component is subject to the same high-quality standards as SmartStax seed for consistent germination, even emergence and excellent stand establishment.
- 4. Comply with refuge requirements.** Acres planted to Dow AgroSciences Refuge Advanced[®] powered by SmartStax[®] protect *Bt* technology by allowing *Bt*-susceptible insects to feed and breed with potentially resistant insects of the same type, thus helping to prevent resistance. With Refuge Advanced, planting a refuge is as simple as pouring the seed into the planter and heading to the field. Multiple modes of action in SmartStax allowed a 5 percent refuge in the Corn Belt.² Several years of testing with SmartStax have demonstrated that a refuge-in-the-bag product like Refuge Advanced is an effective refuge strategy for preventing the development of insect resistance to *Bt* technology. Growers planting *Bt*-traited products other than Refuge Advanced must plant a separate structured refuge to comply with U.S. Environmental Protection Agency-mandated refuge requirements or risk losing access to the technology.



When planting Refuge Advanced[®], refuge hybrids are distributed throughout the field along with SmartStax[®] hybrids, ensuring refuge compliance on the acres where Refuge Advanced is planted.

SUMMARY

Refuge Advanced offered by Mycogen Seeds is a convenient single-bag solution with no separate refuge required in the Corn Belt.¹ Combining high-yielding SmartStax hybrids that deliver the broadest spectrum of above- and below-ground insect protection through multiple modes of action with high-quality refuge seed, Dow AgroSciences Refuge Advanced[®] powered by SmartStax simplifies achieving higher whole-farm yield potential.

AgroServices

Precision. Product. Placement.

¹In cotton-growing regions, a separate 20 percent structured refuge is still required for Refuge Advanced.

²In cotton-growing regions, refuge requirements are reduced from 50 percent to 20 percent.

www.mycogen.com SmartStax[®] multi-event technology developed by Dow AgroSciences and Monsanto. [®]Mycogen and the Mycogen Logo are trademarks of Mycogen Corporation. [™]Refuge Advanced, the Refuge Advanced Logo and “Science. Yield. Success.” are trademarks of Dow AgroSciences LLC. [®]SmartStax is a registered trademark of Monsanto Technology LLC. **Always follow grain marketing and IRM requirements and pesticide label directions.** **B.t. products** may not yet be registered in all states. Check with your seed representative for the registration status in your state. ©2011 Mycogen Seeds. Mycogen Seeds is an affiliate of Dow AgroSciences LLC. S47-383-003 (10/11) BR 010-12759 MYCOGENL0076 RA

