

### **Maximizing Genetic Purity of Corn in the Field**

- If at all possible, discuss planting intentions with neighbors and try to work together to maximize each other's grain marketing options.
- Thoroughly clean all other seed out of the planter before planting.
- Plant on land that did not have the specific hybrid type you are trying to isolate against grown the previous year.
- Plant corn in blocks as large as possible, rather than in several smaller fields.
- Maximize isolation distances from all other corn. This could vary from 24 rows to as much as 1/4 mile or more separation, depending on prevailing winds, planting date, hybrid characteristics and general weather conditions. The greater the isolation distance used, the greater the chance of maximizing purity.
- Until purity standards for acceptance of grain are established by importing countries, it is not possible to establish exact isolation guidelines. However, it will likely be impractical to attempt to isolate cornfields to achieve near absolute purity. The biology and logistics of corn production and pollen movement makes 100% purity nearly impossible to attain.
- To minimize prevailing wind effects on pollination, plant corn hybrids you are trying to isolate to the west or up-wind from all other corn hybrids.
- Staggered planting can also be used to help minimize cross-pollination. The sequence and timing of planting will depend on a hybrid's flowering characteristics and maturity.
- Harvest outside rows of the cornfield where you are trying to maximize purity and segregate this grain for other uses.
- Thoroughly clean combines, trucks, wagons grain augers and storage units when switching from one type of corn to another.
- Consider keeping samples of the seed, harvested grain and delivered grain. Preserve the samples until the grain has met all identity and quality standards of the buyer.

Remember that achieving 100% purity is virtually impossible in seed or grain production. These management practices are designed to help maximize production purity but do not guarantee absolute purity.