



Factsheet

USDA Coexistence Factsheets Best Practices

Coexistence in Agriculture

The growing global demand for healthy food products is bolstering the U.S. agriculture industry and helping solidify the need for different types of production to meet differing market demands. Crops grown using organic, conventional or biotech methods all offer nutritious options to the food and livestock industry, as well as consumers. Understanding and respecting the differences in the way these different types of crops are grown is important for each farmer, and will help achieve coexistence in agriculture communities around the country.

Tools to Help Achieve Coexistence

There are several tools that can be used by states or local communities to help farmers planting different types of crops coexist successfully. Using these types of tools not only helps reduce the risk of commingling, but helps foster good communications among farmers in a specific area.

Pinning Maps

Isolating certain seed varieties in a specific geographic area can be done through pinning maps. Prior to planting, farmers in a given geography meet to agree upon which areas in their region will be dedicated to different types of crop production, including conventional or organic. The map is then managed throughout the growing season by a third party, such as a commodity organization in the area or a local university Extension office. It is important to point out that pinning maps are not a binding legal agreement; however, they do help growers coordinate amongst themselves. It is generally up to the affected growers to resolve conflicts that arise. Pinning maps also help foster communication between different seed companies in a given region. The seed companies agree to quality standards and minimum isolation distances based on the requirements of an end-market buyer. Seed companies also use pinning maps to guide contractual agreements with seed growers.

Planting Zones

Similar to pinning maps, planting zones in a specific geographic area are agreed-upon zones determined before farmers plant seeds to determine which types of production will take place in certain fields. This helps farmers know where to take extra precautions to minimize the risk of commingling. Ideally, planting zones for organic, conventional or biotech seeds are separated by distance, terrain, vegetation or even buildings to help minimize commingling. Planting zones are often best communicated by using a pinning map that is shared with farmers in the area and housed in a third-party location.

Buffer Strips

Buffer strips are small areas or strips of land that are designed to intercept pesticides and pollen, and can be planted on the outer edges of fields to help mitigate commingling. Buffer strips can in some cases be waterways, native forage or trees, or an area of the crop that is harvested and handled separately from the crop. If properly installed and maintained, they can remove up to 50 percent of pesticides. Hedgerows or taller crops, like corn, can also be used as buffer strips. Consider the terrain, wind patterns, proximity of nearby fields and other factors before determining what type and width of buffer strips is most suitable. Different types of crops will require different types of buffer strips to properly protect fields from commingling risks.

Third Party Verification

To help different segments of the agriculture value chain provide credible information to other parts of the value chain, third-party verification is often sought. This verification can be done through certification programs, individuals, or independent entities. Organic farmers seeking USDA certification having verification required as part of the program, and biotechnology seed manufacturers having quality management systems verified are two examples of how third party verification is utilized. More information on different types of third party verification programs can be found in the below links:

- [Certified Organic Third Party Verification](#)
- [Biotechnology Quality Management System verification for biotech seed manufacturers](#)
- [Companies providing agricultural products or services can be USDA verified](#)
- [Guidelines for companies developing, discovering or commercializing biotech seeds](#)
- [Certification for seed manufacturers](#)

Best Practices

Biotech farmers can support and assist neighboring farmers who are growing organic and/or conventional corn by following the following guidelines:

- Follow refuge regulations if planting Bt crop varieties
- Establish good communication with neighboring farmers, and know where organic or conventional crops are planted in your area
- Coordinate planting dates with neighbors to minimize pollen drift
- Spray pesticides in correct weather conditions to avoid pesticide drift
- Clean equipment regularly, particularly if it will be used in multiple fields – dust and grain can contaminate organic and conventional fields
- Keep good records to ensure correct best management practices were taken; this may help limit liability in the case of commingling or contamination.

For organic and conventional farmers, the guidelines below can help minimize the risk of commingling of seeds from neighboring non-organic or non-conventional crops:

- Verify seeds are non-biotech from supplier(s)
- Establish good communication with neighboring farmers
- Know which neighbors are planting biotech crops, and in which fields
- Post fields as organic or conventional (IP or specialty)
- Set up physical barriers by isolating fields with wind breaks or by distance
- Coordinate planting with biotech neighbors to offset pollen drift

- Keep harvesting and hauling vehicles clean or segregate to minimize commingling risk
- Keep equipment, storage facilities and transportation units clean, or segregate
- Keep good records
- Save samples of seed, harvest crop and delivered crop
- Know biotech tolerances, if allowed, outlined in a contract

Using proper growing and management techniques as described above will help ensure a strong agriculture industry for farmers of all types and sizes, and will also help strengthen the markets for organic, conventional and biotech crops in the United States.