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Factsheet

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USDA Coexistence Fact Sheets
Conventional Farming

Coexistence, as defined by the AC21 report, is the concurrent cultivation of conventional, organic, identity preserved (IP), and genetically engineered crops consistent with underlying consumer preferences and farmer choices. In other words, it is the existence of different types of production at the same time and in the same area. Market demands on U.S.-grown crops are increasing, and it will take products from the organic, conventional and biotechnology sectors to meet those demands. Understanding the differences and challenges of each sector, recognizing opportunities for growth in each sector, and understanding how one sector impacts the other two, will be critical as the agriculture industry continues to expand.

Conventional Farming Defined

Conventional farming is the use of seeds that have been genetically altered using a variety of traditional breeding methods, excluding biotechnology, and are not certified as organic. Some conventional breeding methods have been used for thousands of years, often times to develop plants with faster growth, higher yields, pest and disease resistance, larger seeds or sweeter fruit. Conventional crops may be grown simply as commodities and enter the commodity stream where they are mixed with other crops, including GE, or they may be grown to meet a requirement set forth by an end market, such as a specific chemical or nutritional requirement. When conventional crops are targeted for a unique end market, farmers often receive premium prices.

The Importance of Identity Preserved (IP) Crops

Identity preservation is a system that preserves the source and identity of a product throughout the entire production chain and can be important for some conventional crops as well as GE and organic crops. The large majority of IP crops are conventionally grown crops. One example of a crop that might be produced under IP conditions is low-linolenic soybeans, which may be grown to meet the needs of a food manufacturer looking for oil that does not require hydrogenation and, in turn, does not contain trans fats. These would be kept separate from other soybeans so that the high-value attribute would be delivered to the food manufacturer. With IP crops, farmers are responsible for ensuring that quality standards are met on-farm for the product's end market demand. The grower, the shipper, and each member of the value chain work to segregate seed to maintain its purity and assure the value of the product.

Because of the specificity of the seed and its end-use, close tracking and monitoring of the seed from planting to delivery is done to ensure their identity is preserved. For that reason, some conventional farmers must be able to protect their crops from commingling from varieties that do not contain the desired characteristics.

The Markets for Conventional Crops

Conventional crops are grown for many markets, and meeting those market needs may or may not require IP, depending on the crop and the market. One of the more specific markets is the food ingredient market where consumer sensitivities exist around biotech ingredients and IP practices may be required. In contrast, commodity markets for wheat and rice, where biotech varieties have not been commercialized, do not in general require IP practices unless there are additional quality characteristics specified. While not addressing the organic market, conventional products, whether with or without IP, can supply the market demand for specific non-GE food ingredients.

Coexistence: What it Means for Conventional Farmers

Conventional seeds can be contracted under Identity Preservation (IP), meaning that their identity must be segregated from the time the seed is planted until it is harvested and sold. For end markets that want to ensure their product meets certain requirements, IP is a reliable tool. Because of the intensive management that takes place with IP seeds, often times farmers can negotiate a premium price.

Commingling is a risk that conventional farmers must manage well, particularly if their crop is being sold to a market that has specific requirements. Abiding by best practices set forth by individual commodity groups is one way to reduce the risk of commingling from neighboring fields.

Future Opportunities for Conventional Farming

As consumer demands and expectations from the food industry continue to evolve, it’s likely there will be new opportunities in conventional farming. This may be especially true for overseas markets that have specific quality and trait expectations, particularly with food-grade products.