

United States Department of Agriculture

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USDA Coexistence Fact Sheets Sugar Beets

Growing Sugar Beets in the United States

In 2013, nearly 1.2 million acres of sugar beets were planted in the United States, producing more than 32 million tons of sugar beets. Sugar beets are grown in a few select areas around the country, including near the Oregon/Idaho state line; areas of Wyoming, Colorado, and Montana; North Dakota; Northern Minnesota; Northeastern Michigan, Western Nebraska and Southern California. Minor production also takes place in Eastern Washington and South Dakota. Sugar beet seed production occurs primarily in Oregon and Washington.

In the Western United States, where seed production of sugar beets, swiss chard and table beets are all produced, cross-pollination is a concern. All three crops are the same species, and therefore sexually compatible. Isolation has proven to be the best solution to keep cross-pollination of these crops to a minimum.

The Global Markets for Sugar Beets

Nearly all of the sugar beets grown in the United States are intended for sugar production. Sugar beets produce a high amount of sucrose that can be processed efficiently into sugar. The United States is among the world's largest sugar producers. Sugar cane generally accounts for about 45 percent of the domestically produced sugar, and sugar beets for about 55 percent. Sugar expansion in the United States began in the 1980s, increasing from about 6 million short tons, raw value (STRV) to about 8.1 million STRV in the 2000s. The increase in production is due to new equipment, adoption of technologies (including biotech seeds), and improved crop varieties.

The sugar from sugar beets and sugar cane is identical, and whether grown using organic, conventional or biotech methods, has identical nutritional value, composition and wholesomeness. The candy industry is one of the largest domestic buyers of U.S. sugar.

Mexico is the biggest competitor to U.S. grown sugar beets, exporting large amounts of cane sugar to the United States. Mexico is also a competitor to U.S. sugar exports around the world.

Nearly all sugar beets grown in the United States come from seeds that have been genetically engineered through biotechnology. Biotechnology provides seed varieties that help farmers better manage the challenges of weed control. While an organic sugar market does exist, it comes from sugar cane, and in smaller amounts from maple syrup, fruit and agave.

Challenges for Sugar Beet Farmers

Because the sugar beet market that is planted generally uses biotech seeds, and the small geographic regions in which sugar beet seeds are grown overlaps with chard and table beet seed production, seed farmers are often concerned with the risk of cross-pollination between biotech sugar beets, table beets, and the related vegetable, swiss chard. In these instances, isolation seems to be the best practice to minimize cross-pollination, and the distances between fields of different crops or crop species differs. Biotech sugar beets are kept at least 3 miles from any other sexually compatible seed crop. To ensure farmers of biotech or organic crops or seed producers all have the opportunity to thrive, it is critical for farmers to communicate with neighboring farmers and determine what practices will have the least impact on adjacent and nearby fields.

Best Practices for Coexistence Among Sugar beet Farmers

Biotech sugar beet farmers can support and assist neighboring farmers:

- Establish good communication with neighboring farmers, and know where organic crops are planted in your area
- Use pinning maps to identify where other sexually compatible seed crops are being produced.
- A minimum of three miles of isolation distance should be used between biotech beet seed production fields and chard or table beet seed fields.
- Keep good records to ensure correct best management practices were taken

Vegetable farmers can follow the below guidelines to minimize the risk of co-mingling by biotech sugar beets:

- If planting organic swiss chard or table beets, verify seeds are non-biotech from supplier(s)
- Establish good communication with neighboring farmers
- Know which neighbors are planting biotech sugar beets, and in which fields and consider proactively discussing with neighbors challenges that may arise and ways these could be addressed
- Post fields as organic or conventional (identity preserved or specialty), and which crop is grown
- Set up physical barriers by isolating fields with wind breaks or by distance
- Coordinate planting with biotech sugar beet neighbors to offset pollen drift
- Keep good records
- Save samples of seed, harvest crop and delivered crop
- Know biotech tolerances, if allowed, outlined in a contract

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