

GM crops currently on the Market in the United States

More than sixty genetically modified crops have been approved for US food and feed supplies:

- ✿ Corn (20 varieties)
- ✿ Oilseed Rape/Canola (11 varieties)
- ✿ Cotton (11 varieties)
- ✿ Tomato (6 varieties)
- ✿ Potato (4 varieties)
- ✿ Soybean (3 varieties)
- ✿ Sugar Beet (3 varieties)
- ✿ Squash (2 varieties)
- ✿ Cantaloupe
- ✿ Rice
- ✿ Flax
- ✿ Raddicchio
- ✿ Papaya
- ✿ Alfalfa
- ✿ Wheat

Of these crops, only corn, soybeans, cotton, canola, squash, and papaya grown in Hawaii, are commercially produced. More than 85 percent of soybeans grown in the United States are transgenic, GM cotton is grown on more than 70 percent of cotton fields, and GM corn is grown on about 50 percent of corn acreage. Many of the other crops have either been taken off the market, such as potato, sugar beet, flax, and tomato, or have never been commercially grown, such as wheat and rice, due to market opposition.

What's in the GMO pipeline?

The biotechnology industry has promised to deliver a cornucopia of more nutritious, cancer- fighting, better tasting, and more environmentally friendly foods to consumers. But after 10 years of production, most GM crops, such as corn, soybeans, canola, and cotton, are genetically altered to either withstand sprays of herbicides or kill pests. It remains to be seen whether GM crops will fulfill their promises.

Here is a look at GM products either recently introduced or in development:

- ✿ High-lysine corn. Monsanto Company received US regulatory approval for high-lysine GM corn that would be used as animal feed.
- ✿ Omega-3 soybean oil. Monsanto is genetically engineering soybeans with higher levels of hearthealthy Omega-3 fatty acids, hoping to produce healthier cooking oils.
- ✿ Fungus-resistant wheat. Syngenta aims to introduce the first GM wheat, which is genetically altered to resist fusarium, a troublesome fungal disease affecting wheat. Syngenta hopes to introduce the wheat early next decade.
- ✿ Bt rice. Chinese scientists have developed several varieties of GM rice, which have been altered to resist insects or disease. The rice has been field-tested and several thousand tons have already been sold illegally. The Chinese government is reviewing the rice, but no date has been set for its introduction.
- ✿ Golden rice. This controversial GM rice is genetically engineered to produce betacarotene, aiming to reduce childhood deaths and blindness caused by Vitamin A deficiencies in developing countries. Field tests of GM rice are currently underway, but no date has been set for its introduction.

GM animals



Pigs with increased Omega-3 fatty acids. Scientists at the University of Pittsburgh recently announced that they've genetically altered pigs to produce higher amounts of Omega-3 fatty acids. There are doubts about acceptance of the GM pigs.

Joseph Mendelson, the legal director for the Center for Food Safety, told The New York Times, "I am confident that consumers would not want them."



EnviroPig. Scientists at the University of Guelph in Ontario, Canada, have genetically altered pigs to produce manure that contains up to 75 percent less phosphorus, which is a leading cause of water pollution.



- Salmon. Massachusetts based Aqua Bounty Farms has genetically engineered salmon to grow twice as fast as conventional salmon. Environmentalists say the transgenic salmon could escape from fish farm pens and interbreed with wild salmon, threatening the species. The company is seeking approval from the US Food and Drug Administration to market the salmon, which it hopes to do by 2008.

GM vegetables, fruits, flowers, and grass



- Sugar beets. Monsanto plans to reintroduce GM Roundup Ready sugar beets and sell seed for planting this spring.



Plum. The US Agricultural Research Service developed a GM plum that is altered to resist the plum pox virus. ARS has submitted a petition to the USDA for "de-regulated status," which would allow commercial production.



Blue rose. Florigene scientists are developing GM blue roses. In 1996, Florigene introduced a GM mauve-colored carnation that is sold commercially.



Bentgrass. Monsanto and Scotts Company have applied for de-regulated status of Roundup Ready GM bentgrass, which would be grown on golf courses.

- In field tests. A variety of GM fruits and vegetables are being field-tested, including: apple, banana, blueberry, carrot, cranberry, eggplant, grape, grapefruit, lettuce, onion, pea, pepper, persimmon, pineapple, plum, potato, squash, strawberry, sweet potato, tomato, and watermelon.
(SOURCE: Seed World)