## **Agriculture** by Marcia Merry

## FDA okays biotech for wonder foods

The decision serves the interests of the food cartel, not of scientific agriculture.

The U.S. Food and Drug Administration on May 26 issued a regulatory decision approving marketing of new food products that result from genetic engineering of plants. Since that announcement, the FDA and the Bush administration have repeatedly defended the action as furthering science and technology in agriculture.

In opposition, spokesmen for the environmentalist camp, for example the National Wildlife Federation, attacked the FDA action on grounds that it threatens the public with exposure to dangerous foods. Over this summer, the government has decreed that a public comment period take place to address the issues.

Both sides in this controversy are wrong. The foods from gene-spliced plants are not themselves a menace; the interests behind today's biotechnology research are the menace. The FDA decision serves an elite group of cartel food companies that want biotechnology patents for their own profits and food control purposes.

First, consider the question of science in agriculture. The biotechnology referred to in the FDA decision has a limited merit, but it is not at the frontiers of science, nor is it focused on the urgent task of improving the food supply.

The breakthrough areas of agricultural research today lie along the path of understanding mechanisms of photosynthesis by means of electromagnetic scanning and analysis, fine-tuning ways to "farm by the square foot," with controlled-environment agriculture and other forms of hydroponics, aeroponics, and similar approaches.

These investigations were the featured theme at this year's international conference of the American Institute of Biological Sciences, which considered how to increase food yields in such controlled environments as lunar capsules for space travel.

In contrast to this, the U.S. agribiotechnology "industry" consists of laboratories focusing their research on achieving various particular characteristics in fruits, vegetables, grains, oil crops, etc., that are desired for use as "wonder foods," in a U.S. and international food chain that is increasingly dominated by a small group of cartel commodity and chemical companies, such as Cargill, Continental, ADM, Monsanto, and DuPont. Much of the agri-biotechnology research is funded by these companies, which in turn own many of the labs.

What kind of "designer" foods are they seeking? The premium is on quick-growing bio-mass crops that can fuel ethanol production; rot-resistant fruits and vegetables that can withstand long-distance warehousing and stock the new mega-supermarkets run by Wal-Mart and other chains; and other "wonder crops" that can be grown by factory farms, not family farms.

U.S. biotech research today typically involves various gene-splicing methods, including transfers from one species to another—for example, introducing a trait from a fish into a fruit that may impede frost damage.

Much of the knowledge gained and the techniques refined are very valuable. However, the work has focused on the objective of giving the select few cartel companies sweeping patent rights that will be upheld internationally by the U.N.

The FDA said that its May 26 decision is in line with the views of all the international agencies. The *Wall Street Journal* praised this and said that the FDA decision sent a "bullish signal" to the biotech stocks.

Consider these examples:

• Wheat. In June, Monsanto applied for a patent on a new type of wheat achieved through genetic engineering. The new wheat strain was engineered to resist certain weedkillers, allowing the plant to flourish while herbicide destroys the weeds. Monsanto-funded scientists worked for 10 years on this project.

Monsanto is demanding sweeping patent protection for the wheat, including for the means used to produce it, and including rights to penalize any farmer for attempting to grow it himself.

• Tomatoes. Calgene, Inc. of Davis, California is ready to rush to market its new rot-resistant strain of tomato, the Flavr Savr, which will last for 20 days on the shelf. Calgene has been in the forefront of the national campaign for "alternative agriculture"—the code name for low-income farming.

A top Calgene executive, Robert M. Goodman, served on the board of the National Research Council, which in 1989 released the book Alternative Agriculture, whose purpose was to rationalize low-input farming and "wonder foods." The book was a hodge-podge of excuses for why agricultural chemicals should not be used, why modern water projects should not be developed, etc. The arguments were so unfounded that the executive director of the team that produced the study, Charles M. Benbrook, was forced to resign in disgrace.