

Tide Turns on GM Rice

Alex Jack

The grassroots organization, with branches from sea to shining sea, has asked for a moratorium on growing GM rice, wheat, and other staples and called upon the nation's food producers to pledge not to use GM ingredients in their products, pending comprehensive studies of the impact of GMOs on human health and the environment.

In a meeting at his office in Sacramento, Tim Johnson, president of the California Rice Commission, confirmed that California rice farmers were mad as hell at Monsanto and other biotech companies that came in and tried to tell them how to manage our business. He acknowledged that the biotechnology industry tried to intimidate growers, telling them what to grow, threatening to make GM seeds available to farmers in other states, and engaging in personal attacks.

At the present time, there is no GM rice on the market in California or anywhere else on the planet. Dozens of varieties are in research and development and originally were targeted for commercial release in 2001 and 2002. However, mounting public concern over the effects of GMOs, especially contamination of ordinary crops, has derailed their introduction. Japan, which purchases a quarter of California's \$500 million annual rice crop, has indicated that it won't take GM varieties. Turkey, the second largest importer, is seeking to join the European Union, which has stringent non-GMO policies, and has also signaled that it is not interested in GM varieties.

In California, the epicenter for medium and short-grain rice production in the United States, farmers successfully lobbied for legislation to keep different types of rice separate. Known as IP (identify protection) the system regulates what kind of seeds are sold, how they are planted, harvested, transported, and otherwise commingled. The IP legislation slowed down the introduction of GM rice in California, Tim explained. If the farmers are not in charge, anyone would be able to sell those seeds. But it takes time to implement. I'll feel better when the IP system is up and running next year.

The Southern rice industry (which produces primarily long-grain rice) is also backing away from new GMO varieties. Because of the staunch opposition in Europe, Southern rice farmers are afraid they may lose their largest market, Tim continued.

The Amberwaves petition, circulated at natural food stores, churches, and community centers throughout the country over the last year, states: I oppose GM rice and support efforts, including mandatory labeling of all GM foods, to preserve organic and natural rice, wheat, and other essential foods for my children, grandchildren, and future generations. Through my food choices, I will strive to keep America and the planet beautiful, healthy, and peaceful.

In support of the petition, Amberwaves issued a small book, *Saving Organic Rice* (edited by Alex Jack and Edward Esko), with articles by Vandana Shiva, the Indian

environmentalist; Mae-Wan Ho, the British geneticist; Paul Hawken, the social activist; and other prominent scientists and educators on the potentially harmful effects of GM rice. These include reduced nutrition, increased vitamin A toxicity, increased allergens and toxins, use of increased pesticides and chemicals, emergence of new disease-resistant weeds, the appearance of new viral diseases, loss of biodiversity, and a threat to sustainable agriculture.

This past year, Amberwaves also commissioned the first independent analysis of LibertyLink rice, the first GM rice expected to be released in the U.S. Dr. Joe Cummins, a geneticist who has published over 200 research articles, reported that LibertyLink rice, used in conjunction with the herbicide glufosinate, is associated with birth defects, brain damage, miscarriage, and other serious disorders. Several years ago, this variety of GM rice was banned by the government of Brazil for environmental reasons.

The presentation of the Amberwaves petition came just a week after the biotech industry announced that it had completed decoding the rice genome. Around the globe, the media trumpeted the event as a breakthrough that would accelerate the introduction of GE rice and lead to the development of many new modified varieties. The genome will benefit conventional breeders more than GM, Tim predicted. It allows this characteristic to be associated with that quality. Regular crossbreeding stands to benefit.

The only wild card in California, Tim noted, was a small field of experimental GM rice in the Sacramento Valley that has been spliced with human proteins. Manufactured by API, a small venture capital company, the rice is intended to produce drugs and is not approved for human consumption. Tim said the possibility of contamination of surrounding crops is minimal because Japonica, the variety of rice grown in California and the Far East, doesn't have a lot of pollen drift like Indica, the variety grown in the South and India. Amberwaves and other environmental groups have expressed concern that birds and animals might spread seed to surrounding farms.

Another potential problem he identified was China, which has a history of hijacking technology, especially bad technology. Tim warned that if China introduces GM rice in the next several years, it may affect the West because China exports rice to Mexico and Central America. It could easily spill during loading and transportation, he explained, and get mixed with non-GMO varieties.

Overall, Tim observed, biotechnology as yet has not demonstrated that it can benefit the consumer. Until it does so, farmers will seek proven input traits that have value. More rice today is grown organically. There's value there. We're better off in the farming community and the customers are happy.

In addition to presenting the petition, Amberwaves offered to cooperate with the California Rice Commission in launching a national Rice Is Nice campaign to increase per capita rice consumption, promote the health and nutritional benefits of rice, and develop organic and natural products made from rice.

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