

Brazil vs. Monsanto

Brazilian soy crushers and exporters will refuse to collect royalties on illegally planted, genetically modified Roundup Ready soybeans for biotech giant Monsanto Co., an industry leader said Friday.

"The crushers and exporters are not involved in the illegal planting and we believe it is unfair that we should be used to collect for Monsanto," said Carlo Lovatelli, president of the Brazilian Vegetable Oil Industries Association (Abiove). In June, Monsanto said it would expect exporters to sign royalty contracts by July for 2003-04 soy crop shipments. Monsanto warned that Brazilian soy shipments from non-complying exporters could be stopped from August on by customs in countries where Roundup Ready is patented—most European countries, Japan, U.S., and Canada—and treated as pirated produce if genetically modified organism traces are found.

But Lovatelli said none of the Abiove member companies, which make up around 90% of the country's crushing capacity, have signed or will sign. Exporters do not believe Monsanto will have ships stopped, something that very rarely happens, he said, adding that importers had told exporters they would not require an accord with Monsanto to do business.

Monsanto chose to charge royalties from next year on because of the quick spread of illicit plantings. Most of these beans are Roundup Ready, derived from seeds smuggled from Argentina and Paraguay. A Monsanto spokeswoman said the company would not comment on the matter while talks were ongoing. Lovatelli said Monsanto should be a little more patient as there is a chance the government will legalize GMOs before the next harvest.

If Monsanto does try to halt ships or charge royalties, exporters will take them on, he added, noting that the shippers were large multinational firms. Around 35 exporters account for 95% of Brazil's soy shipments. Monsanto has no patent for Roundup Ready in China, Brazil's main soy market, which accounts for around a third of bean exports.

From Sao Paulo, OsterDowJones.

Liquid Oxygen for Catfish

An improved method for supplying farm-raised catfish with sufficient oxygen during a crucial production stage has been developed.

Farm-raised channel catfish are harvested with long nets pulled by tractor and hydraulic net reels. In harvesting's final stages, fish are concentrated in net socks at high densities and often held overnight to allow smaller fish to slip out.

To provide oxygen, water is slowly moved through the sock with tractor-powered or electric paddle wheel aerators. This increases water velocity through the sock, adding to the metabolic oxygen demand of the fish, which are further crowded to facilitate loading on a transport truck. This often results in hundreds of pounds of dead fish arriving at the plant.

Les Torrans, a research fishery biologist with Agricultural Research Service's Catfish Genetics Research Unit in Stoneville, Mississippi, says a new system called the Sock Saver means more live fish could make it to market. He designed and built equipment to use liquid oxygen (LOX) during harvest with Charles D. Hogue, Jr., of the Mississippi State University Extension Service, and Sam Pilkinton of Columbus, Mississippi, a catfish farmer and live hauler.

Most private live haulers and fingerling producers now use LOX on their transport trucks, and many farmers use it on their farm trucks when moving fish from pond to pond. The Sock Saver, a small trailer holding three 50-gallon LOX tanks, is hauled behind a pickup truck or small tractor around commercial ponds to wherever fish are being harvested. Hoses are used to inject pure oxygen through diffusers into a slow water current moving through the sock, increasing dissolved oxygen by as much as 0.9 milligrams per liter.

Research also shows that increasing dissolved oxygen results in faster-growing fish. Techniques for using LOX in ponds during the production cycle will be developed soon.

Read more in the August 2003 issue of Agricultural Research magazine, available at www.ars.usda.gov/is/AR/archive/aug03/oxygen0803.htm.

Tunnels for Flowers

Mime (pronounced Mee-muh) Davis, owner of WildThang Farms in Ashland, Missouri, grows more than 200 varieties of flowering crops for regional florists and farmers' markets. She is making the growing process more energy efficient thanks to a Missouri Sustainable Agriculture Demonstration Award grant.

Davis received a grant to build natural greenhouses on her 15-acre farm. The plastic-and-mulch tunnels extend the growing season for her cut flowers and are used in place of more costly greenhouses that rely on non-renewable energy sources for heat.

In addition to curtailing fuel use, the low-tunnel technology allows WildThang Farms to grow flowers for two additional months in the spring, a time when Missouri florists normally import flowers. The additional flower sales allow the farm to hire staff from the rural community for a longer time.

"Missouri weather may drop a hard freeze as late as mid-May," said Davis. "Our hoop houses and low-tunnel technology allow us to grow our flowers outdoors using spring sunlight to warm the soil, rather than starting the plugs in a greenhouse and waiting to transplant them outside after all danger of frost is gone."

Davis' project tests two types of low tunnels. One, called a zip house, allows easy ventilation and uses a rope system to open and close two layers of plastic to let in sunlight.

The other tunnel type uses pre-cut wires bent into hoops across the flower beds. The wire hoop frames are covered with plastic and anchored with sand-filled bags. To suppress weeds, the beds are covered with plastic mulch that warms the soil and promotes early spring growth.

Davis said she expects to cut the second batch of flowers grown under these two systems in June. WildThang Farms specializes in unusual flower varieties, including native Missouri wildflowers such as Queen of the Prairie and Butterfly Weed.

Contact WildThang Farms, 14150 Bob Veach Rd, Ashland MO 65010. For more on Mo. Sust. Ag Awards, contact Missouri Dept. of Ag, Sustainable Ag Program, PO Box 630, Jefferson City MO 65102-0630; 573-751-5505.