

# FDA Approves Use Of Monsanto's BST

(Continued from Page A1)

teria is safe for use in stimulating additional milk production in lactating cows.

Although Monsanto was not the only business to develop and research BST, it is the first to get its brand, being marketed as "POSILAC," approved for commercial use.

For several years, milk and meat derived from dairy cattle involved in research trials of injectable BST has been approved as fully safe for human consumption.

Because BST is a protein and is destroyed by digestive acids, it cannot negatively affect the health of a human if directly injected.

Even if it were to be accidentally injected into a human, it would have no effect, because it is specific for "lower" animals. By lower animals, it is meant that the chemical receptors in humans for a somatotropin are more complicated and not designed to accept BST.

Human somatotropin works in humans, but bovine somatotropin does not.

Bovine somatotropin is a messenger protein hormone which directs the cow to send nutrients to the milk-producing part of the udder and thereby stimulate additional milk production. The quality of the milk is virtually identical. There is no means currently available by which anyone can differentiate between milk produced by treated or untreated cows.

Researchers, affiliated and unaffiliated with companies developing BST for market, have said that in order to use BST properly requires excellent herd management.

It will work immediately in a cow, but feeding and nutrition must be carefully watched, similar to the care and feeding of currently high producing cows, whose production is attributed to genetic selection for high production.

An information package sent out to media by Monsanto this week included a pamphlet that ostensibly is designed to be distributed to dairymen.

The 12-page (counting both sides of each page) pamphlet presents an overview of the benefits, the use and handling of POSILAC, projected financial gains, and the selection of cows for treatment.

Specifically, the brochure states that for selection of cows, dairymen should: "Select healthy cows. Select cows that are nine weeks in milk. Practice good nutritional management."

Further it states that, "Availability of balanced feed is the most important factor in determining response to POSILAC. Cows should be fed a balanced ration based on their production level following guidelines established by the NRC. Feed should be available to cows at all times. Feed bunks should be managed to assure that feed is always fresh and of a high quality."

The financial advantage to using BST treatments can not be objectively determined because Lisa Watson, manager of health and consumer affairs for the Public Affairs Office of the Animal Sciences Division of Monsanto, said Wednesday that a price per dose has not been released.

Monsanto apparently is geared up to take orders for the drug.

In the brochure, there is printed several times a 24-hour, toll-free number for dairymen to call to order POSILAC. A delivery of

POSILAC is to come to the dairyman's door within 48 hours by express mail, except for first orders, which may take longer.

However, a pre-recorded message is currently the response to the toll-free call (1-800-233-2999) to Monsanto. The message states that the FDA has approved POSILAC and that the customer service department will be available Nov. 15.

In the brochure, under instructions for its use, it states that the material should be warmed from refrigerator temperature to room temperature (59- to 86-degrees) before injecting into the tailhead, or neck area of the cow.

The doses, injected once every 14 days, are to come in prefilled syringes. Also, with each order is to be included a syringe disposal container and a warning not to reuse any of the syringes.

The brochure indicates that the syringe disposal container, once full, is to be mailed through the federal postal system to a subcontracted disposal company — at no additional cost to the dairyman.

Dairy producers cannot yet use Monsanto's product, however, for at least 90 days because of a moratorium imposed by the U.S. Congress, which reflects a similar moratorium in the European Community.

Some opposition to the use of the product is expected, but to date, the tactics of opposition groups have been to sensationalize the issue without the benefit of sound fact or science.

Some newspapers have quit reporting the "news releases" of such organizations.

There are also other groups and individuals that have claimed opposition to the use of BST because of possible competitive disadvantages to those who operate "family farms."

Dr. Robert Yonkers, PSU Extension agricultural economist based in State College, said Monday that it is too early to predict what kind of effect BST might have on the competitiveness of dairy operations.

He said that it could possibly hasten an irreversible trend toward fewer, but larger dairy operations, and further loss of the one-family farm.

That trend has been continuing since the advent of the industrial age.

This year, the USDA ceased its annual survey of family farms in the United States — not just dairy operations — because the number of farm families has dwindled to represent less than 1.8 percent of the total U.S. estimated population.

Yonkers did say that most studies which project dairy industry costs and milk prices out to five years show that the farmgate milk price will be lower with or without BST. He said that with BST, some predict that the price should be lower by 25 cents to 50 cents per hundredweight of milk.

"But then you get into all those assumptions," Yonkers said about the studies he's read. He said that his opinion is that it is too early to make any kind of supportable prognostication.

He said there are too many variables to determine BST's impact to the dairy industry.

However, Yonkers said that other studies show that the use of BST may well lower the cost of production from 50 cents to \$1 per hundredweight of milk.

Monsanto and others prepping

to sell BST have promoted this projection.

"We are very pleased with the FDA's thorough review and subsequent approval of POSILAC," said Walter Hobgood, vice president of Monsanto's Animal Sciences Division, in a prepared statement.

"This new product will enable all U.S. dairy farmers, regardless of the size of their operation, to improve their herds' productivity.

"Supplemental BST is the first of many agricultural biotechnology products that American farmers will be able to depend upon to help them maintain their position as dependable, efficient suppliers of the world's food," Hobgood said.

According to the statement, "Since 1982, approximately 10,000 dairy cows have received supplemental BST in Monsanto-sponsored research studies, conducted at more than 100 universities and commercial dairy farms in the U.S. and abroad."

## Export Demand Fuels Increase In Poultry Production

ANDY ANDREWS

Lancaster Farming Staff

MANHEIM (Lancaster Co.) —

Strong rises in poultry export levels are fueling demand for chicken parts, and provide some good news for domestic producers, according to a USDA economist.

Dr. Milt Madison, USDA Economic Research Service (ERS), poultry analysis division, told a group of about 32 poultry industry representatives at a seminar on Monday that "one of the things that has been driving the broiler industry is the U.S. consumer liking breast meat, and a lot of the rest of the world willing to buy dark meat as long as it's at cheap prices." Exports, mostly to Mexico, will continue to increase in the coming year.

Madison was on hand to discuss the 1994 outlook for poultry producers. The information was gathered from the Economic Research Service's "Livestock and Poultry Outlook Report," which is changing from a six-times-a-year publication to monthly, and will have a format much like the monthly supplement, "Livestock and Poultry Update."

"One of the things we see with the record exports this year is a little bit of change in the pattern of the parts prices for broilers," he said. While breast prices have dropped 15 percent from August through October this year, leg quarter prices have increased 10 percent. Whole bird prices remained constant.

In 1993, demand for broiler product jumped about 20 percent over a year ago. In 1994, USDA-ERS predicts about a 4-5 percent increase in exports, according to Madison, which makes up about 8 percent of total broiler products being produced. That will mean about 2.3 billion pounds of products being produced overall.

Net returns are up slightly from a year ago, but 1994 should see a downturn because of slightly higher feed costs. Corn prices will be about 30 cents per bushel higher, while soybean prices will experience a \$12 per ton decline.

This year, according to the ag economist, broiler companies "at the wholesale whole bird level are earning about 7 cents a pound on broiler production," he said. Next year, however, the net returns will

In its statement, Monsanto said that during the 90-day moratorium on the use of BST, it "will be active in educational efforts targeted to dairy producers, veterinarians and nutritionists."

The FDA approval was also supported by the American Dietetic Association, in Chicago, Ill., by the Animal Health Institute, based in Alexandria, Va., and by the U.S. Department of Health and Human Services.

Furthermore, according to the U.S. DHH, Monsanto has agreed to conduct a post-approval monitoring program that includes a two-year, before-and-after BST followup of milk production and drug residues in the top 21 dairy states; a 12-month comparison of the proportion of milk dumped because of residues between BST herds and non-BST herds; a reporting system to monitor all BST use and follow up on complaints; and monitor mastitis, animal drug use

and resultant milk losses in 24 commercial dairy herds using BST.

As far as the impact of BST on Dairy Herd Improvement Association record keeping, Phil Dukas, CEO of National DHIA, said Thursday that there has been found no way for DHIA to track the use of BST, although it would be beneficial to the integrity of the record keeping system reflecting the genetic characteristics of a line of cattle.

However, in the National DHIA rules there is a provision that technicians are bound to report and include in a permanent record any injections they observe:

*"The injection of any substance immediately prior to, or during, a milking on test day will require the application of an appropriate permanent label."*

A "permanent label" means it is reported on the cow's test record.



Dr. Milt Madison, ag economist with USDA-ERS, poultry analysis division, right, spoke about the poultry outlook for 1994 at the poultry management and health seminar on Monday. Dr. Patty Dunn, research assistant, Penn State Dept. of Veterinary Science, presented a Marek's Disease Update at the seminar.

be a couple of centers per pound lower, he said, because of the increase in feed prices and an overall lower price per bird.

In 1994, egg production will be put about 1 percent over the 1993 level. The 1993 net returns are about 9 cents per dozen at wholesale level. Next year will remain profitable, with a small increase in demand for egg products during the Thanksgiving and Christmas holidays. Madison said the shift in buying from an older to a younger market means demand will show some strength.

Egg exports make up only 3 percent of the total production, but with no large impact on price. For 1994, net return should be about 5 cents per dozen, with egg prices down about 3 cents per dozen.

Turkey producers should expect demand to spark a 1 percent increase in meat production. Returns should be at the break even level, mostly because of a slight increase in feed costs.

The proposed NAFTA will have little or no effect on export demand for poultry products, according to the ag economist.

### Marek's Disease Vaccine

A vaccine to control Marek's Disease (MD) is only as good as what you do with it and requires a

"multifactorial," approach, including proper selection of birds for resistance to the disease and overall bird health management, according to Dr. Patty Dunn, research assistant in Penn State's Department of Veterinary Science.

Dunn described the "cancer-like" disease which leaves many birds with the characteristic "split-leg" stance and which attacks the bird's central nervous system, spreading tumors throughout the body. The disease was first identified in 1907 by Jozsef Marek, but through the years, more potent and deadly serotypes have been identified.

The disease, a herpes virus, infects the lymphocytes, or white blood cells important to the bird's immune system. Three serotypes exist — the oncogenic, which causes the severe form of the disease (tumors); non-oncogenic, which produces no tumors; and the herpes virus of turkeys, known as HVT.

MD can attack chickens at 5-6 weeks of age, but more frequently attacks them at 12-24 weeks of age. The disease is prevalent throughout the world, and when a chicken gets the disease, it is with the bird for life. The virus affects chicks within one week of hatching.

(Turn to Page A25)