

reforms. Providing more and better quality foodstuffs would be one way to seek that support, she said.

Lischenko said Soviet attempts to raise soybean production to 2 million MT a year have failed, partially because Soviet growers are unfamiliar with the crop. He noted there are efforts, including higher procurement prices, to produce more oilseeds. Rapeseed production is expected to rise from 110,000 MT in 1987 to 450,000 MT by 1989, according to a recent report from USDA observers in the Soviet Union. Cottonseed production is nearing 5 million MT annually; sunflowerseed production is around 6 million MT annually.

Lischenko noted the Soviets are interested in canola-style rapeseed and also are looking at lupins and peas as potential domestic protein crops. Lischenko said that while the U.S.S.R. may be the world's largest producer of single-cell protein—about 1.2 million metric tons annually—it is quite expensive and soon may be subject to a reappraisal of the emphasis that should be placed on the program.

Trade complaint

Early 1989 may be the soonest that a General Agreement on Tariffs and Trade (GATT) panel can begin hearings on a U.S. complaint that European Economic Community (EEC) oilseed producer subsidies constitute an unfair trade practice, violating the GATT agreement.

The EEC dropped objections to the formation of a three-member hearing panel earlier this year, but the U.S. refused an EEC proposal to have representatives from Finland, Brazil and the Philippines constitute the panel.

John Baize, chief trade policy staff officer for the American Soybean Association (ASA), said a panel might not be selected until the end of October. Baize's comments were made during the ASA annual meeting Aug. 5-8, 1988, in Denver, Colorado.

At that time, the EEC and U.S. also had not yet agreed on the "terms of reference" for the hearing. Defining those terms will es-

entially set the hearing panel's scope, Baize said. The agreement on "terms of reference" is needed before a hearing can begin. The relative slow pace toward a hearing may be a deliberate effort by the EEC to delay the hearing until after a December 1988 meeting in Montreal to review progress in the current Uruguay Round of GATT negotiations, Baize said.

Selecting representatives for the panel also is a major task. Baize said the U.S. will oppose any European or Nordic representatives, as well as those of specialized trading blocs. He speculated that the U.S. might accept a panel composed of representatives from Iceland, Korea and Singapore.

If a hearing upholds the U.S. complaint, the U.S. could impose tariffs on EEC exports to the U.S. to offset economic loss outlined in the complaint. The entire hearing procedure would be aborted at any time by a compromise settlement. As of early August, no offer had been made to the U.S. by EEC representatives, according to Baize.

U.S. representatives have been dropping hints in Europe as to what goods might be targeted for tariffs, hoping representatives of those industries will urge the EEC to a compromise settlement. The U.S. could target any goods—not just agricultural products—for offsetting tariffs if a GATT hearing panel upholds the complaint.

Japan update

The Japan Oil Chemists' Society has set up an oilseed protein research division. Members are T. Watanabe of Kyoritsu Women's University, chairman; K. Saio of the National Food Research Institute and I. Hara of Tosoh Corp., managers; and S. Arai of the University of Tokyo, M. Kito of the Research Institute for Food Science at Kyoto University, H. Sakurai of Nara National College of Technology, H. Taniguchi of Fujio Oil Co., Y. Doi of the Ajinomoto Corp. and T. Toyama of the Nissin Oil Mills Ltd.

Japan oilseed processors saw 1987 sales decline to 85.6% of those in 1986 and a decrease in terms of

value, chiefly due to recent high appreciation of the yen. Tadasu Toba, president of the Japan Oilseed Processors Association, noted that processing profit decreased by 14.5% from 1986. The milling industry saw profits increase by 12.4% and compound feed industry's profit rose by 34.1%.

Meanwhile, Mori Oil Mills, a corn oil manufacturer in Japan, has announced it will produce natural pigments, spice extracts, flavor and other food additives by using supercritical extraction. The company's factory at Matsuzaka, Mie Prefecture, will be one of the largest plants in the Japan industry.

Research notes

University of Minnesota scientists have found that by removing oligosaccharides from soybean meal, chickens can obtain more energy and nutrients from the meal and other ration ingredients, according to a report in the August/September 1988 issue of *Soybean Digest*.

Craig Coon and Mel Hamre, poultry scientists with the Minnesota Agricultural Experiment Station, have reported that rations containing oligosaccharide-free soybean meal remain in the gut of chickens approximately 30% longer than a ration from which oligosaccharides have not been removed.

Meanwhile, U.S. Department of Agriculture scientists in the Agricultural Research Service laboratory in Lubbock, Texas, believe they know why heat damages plants, a discovery they hope will lead to crops better able to withstand not only heat and drought but other stresses as well.

Two enzymes—glutathione reductase and hydroxypyruvate reductase—are now thought to function best within a temperature range scientists call a "thermal kinetic window." Researchers believe that as the plant's temperature rises above the "window," it begins losing its ability to cope with heat stress. This "window" varies by plant species. The scientists hope to transfer one plant's genes for controlling an enzyme's temperature-specific behavior into other plants.