

(Continued from page 1574)

- Vegetable oil commerce and trade, including feed control, storage and shipping of seed and oil.

- Nutrition values of vegetable oil, including the different fatty acids, vitamins and other elements in oil.

- Methods of edible oil processing, including crushing, pressing, solvent extraction and refining.

The library and archives include scientific literature and documents, cassettes and slides. In the lecture hall, visitors can watch audiovisual programs tailored to their age or interest. During the olive harvest, visitors can produce oil in the museum courtyard by operating different reconstructed oil presses dating from the 10th century B.C. to the 19th century A.D.

#### Other activities

Educational activities at the museum include intensive courses related to development of the industry, conducted with the cooperation of the Ministry of Education and academic institutions. Students are encouraged to participate in surveying and recording artifacts of old machinery and ancient installations in the vicinity of their hometowns.

Research is conducted by the museum curator with the cooperation of academic institutes and colleges. Among the projects are the Kla' excavation (the Institute of Archaeology, Tel-Aviv University); the oil industry at Tel Miqne-Ekron (the Hebrew University, Jerusalem); The Allbright Institute of Archaeology; and the survey of ancient agricultural industries and survey of Mount Menashe (Department of Archaeology, University of Haifa).

The museum also organizes scientific national conferences. During December 1987, it conducted an "Olive Oil in Antiquity" conference as a joint project with the University of Haifa. A book that included articles submitted by speakers was published prior to the conference and served as a basis for the discussions.

Any organization or individual wishing to assist the museum by providing data, exhibitions or con-

tributions can contact David Eitam, Israel Oil Industry Museum, Trust No. 85-007-388-0, POB 136, Haifa 31000, Israel.

## Thailand plant

Boso Oil and Fat Co., a major manufacturer of rice bran oil in Japan, and Nissho Iwai Corp. have established a new firm to extract rice bran oil in Thailand in cooperation with Soon Hah Sen Co., based in Bangkok.

The new facility is expected to start operation in May 1989, with production capacity to produce 550 tons of rice bran oil a month. Boso plans to import half of that produced into Japan and sell it after refining.

According to a report from the Japan Oil Chemists' Society, Japanese domestic availability of rice bran oil has been decreasing due to reduced acreage devoted to rice. This new plant in Thailand will help stabilize the rice bran oil supply in Japan, it said.

## Fish oil plant

E.P.A. Ltd., a subsidiary of Capsule Technology Group Inc., has officially opened a marine lipid manufacturing plant in Mulgrave, Nova Scotia.

The plant will manufacture "Epa-Chol," a marine lipid concentrate in free fatty acid form. The patented product will be sold in bulk or shipped to company facilities in Windsor, Ontario, Canada, to be used in encapsulated fish oil products for use as food supplements.

The official opening of the plant was Aug. 12, 1988. The facility has the capacity to produce 300 metric tons of the concentrate annually.

## Flavor market

The U.S. market for flavors and fragrances will rise from \$2.3 billion in 1987 to \$2.8 billion by 1992, according to a study by Frost & Sullivan Inc.

The largest end user of flavors is the food and beverage industry,

accounting for \$1.22 billion in 1987. This is expected to increase to \$1.63 billion by 1992.

The largest end users of fragrances are cosmetics and toiletries. Fragrance ingredients are used in cosmetics, hair care products, men's toiletry products and women's fragrances. The study predicted an annual growth rate of 3% in this category. The use of fragrances in soaps and detergents can be expected to grow 3.7% annually, according to the study.

## Bottle study

U.S. sales of high-performance bottles will reach \$380 million by 1992, according to a study by Kline & Co., packaging industry consultants.

Food applications will account for the largest potential, according to the 100-page report, predicting further expansion of squeezable bottles to new products such as dressings and sauces. In addition, wide-mouth clear containers will emerge for many products, to replace traditional glass jars.

"The major reason for the growth in high-performance bottles is the consumer's overwhelming acceptance of plastic as a replacement for glass and metal containers," according to Mary Vaughn, senior consultant with Kline & Co.

## News briefs

R. & H. Hall has purchased Frank Fehr & Co. (Ireland), the Drogheda-based supplier of blended oils and fats to Ireland's animal feed industry. Frank Fehr & Co. (Ireland) is a subsidiary of Frank Fehr & Co., supplier of blended oils and fats to the United Kingdom's animal feed industry. The new company will be known as R. & H. Hall (Oils & Fats).

Ralston Purina Co. has agreed to sell its Van Camp Seafood division to a group of investors that include PT Mantrust, a privately held Indonesian concern, and Prudential-Bache Securities Inc.

Arthur A. Dube has been promoted