

"Therefore, the corporation . . . constructed, during 1954, a triple superphosphate addition . . . with enough dicalcium phosphate being produced to maintain a market position. Manufacture and sale of triple superphosphate on the basis of current results and indications will greatly reduce or eliminate the losses of this new division."

The research division, he said, has developed an improved method to concentrate wet process phosphoric acid. A new process has been developed to produce glutamine in commercial quantities. This is useful for medical and biological purposes and will be sold at about 20% of its former price.

## **GOVERNMENT**

### **FDA Tightens Restrictions on Filth in Wheat**

Food and Drug Administration announces it will tighten sanitary requirements on wheat beginning next July. Legal action will be taken by FDA against wheat containing 1% or more rodent pellets per pint or 1% or more of insect-damaged kernels.

Present regulations, in effect since last January, call for not more than 2% rodent pellets per pint and 2% insect-damaged kernels. Under these levels, FDA had examined 3754 cars of wheat until July 21, 1955, and found 29 cars to contain excess rodent filth, and three cars containing 2% insect-damaged kernels.

George P. Larrick, FDA commissioner, said that experience shows that regulation should be tightened if it is to be effective. He emphasized that deliberate mixing of clean wheat with filthy wheat and use of continued insanitary storage conditions will be violations per se.

### **Fees Raised for Registration Under Miller Pesticides**

The Food and Drug Administration announces that it has doubled the fee for setting of the tolerance for pesticides on raw agricultural commodities. The fee will now be \$1000 and should accompany each request for the establishment of a tolerance, plus an extra \$100 for each raw agricultural commodity over nine for which a tolerance is requested.

The fee changes were published in the *Federal Register*, Sept. 16.

## **FOREIGN**

### **Two Plants to Boost Fertilizer Production in Israel**

Plants for the production of phosphoric acid and potassium sulfate have started operations as part of the extensive \$15 million Fertilizers & Chemicals,

Ltd., installations, at Haifa, Israel, according to *Economic Horizons*, publication of the American-Israel Chamber of Commerce and Industry.

The phosphoric acid plant has an annual capacity of 7500 tons. Provisions have been made for expansion of the plant at a later stage to double its present capacity. The output of this new plant will be used in the production of superphosphate and triple superphosphate. The basic raw material—phosphate—is mined in the Negev, Israel's desert in the south, where abundant quantities of rock phosphate are available.

The other new unit, for the production of potassium sulfate, has an annual capacity of 14,000 tons. A major portion of the output is earmarked for export.

Fertilizers & Chemicals' major production so far comprised sulfuric acid and superphosphate. Additional plants under construction, scheduled for completion before the end of this year, include units for the production of ammonium sulfate and nitric acid.

### **Puerto Rico to Get 42,000-Ton NH<sub>3</sub> Plant**

Construction is to begin shortly on a new anhydrous ammonia, sulfuric acid, and ammonium sulfate plant at Guanica, Puerto Rico for Gonzales Chemical Industries, Inc., San Juan. Forty-two thousand tons of anhydrous ammonia will be produced per year. Part will be sold as such, and the balance will be converted to aqueous ammonia, sulfuric acid, ammonium sulfate, and possibly other materials for use by agriculture and industry.

The installation was designed and will be built by the Lummus Co.

The plant will provide a dependable source of ammonia nitrogen and related products for fertilizer, and for the industry of the island. This is of particular importance in times of international emergency when shortages can seriously handicap industrial chemical developments and growers.

## **RESEARCH**

### **Fertilizer Important in Pasture Management, says USDA**

Results of two research projects conducted by the Department of Agriculture recently emphasize the importance of fertilizer in pasture management.

In one project, USDA scientists at the Beltsville, Md., facility, found that drill seeding and band fertilization yielded

more forage that broadcast seeding and fertilization. In one comparison, broadcast seeding of four pounds of tall fescue and one pound of Ladino per acre with broadcast application of 750 pounds of 3-12-6 fertilizer per acre yielded 817 pounds of weed-free dry matter in the initial harvest. When the same mixture of seed was drilled and the same amount of fertilizer was banded an inch below the seed, per acre yield of dry matter averaged 2865 pounds. Similar information is now being sought about sericea lespedeza, orchard grass, and birdsfoot trefoil. In addition, study is being started on the effect of placement of the individual fertilizer elements.

In another project, directed to problems in the Northwest, USDA researchers found that three factors are important in developing good, high-yielding pastures with the right grass-legume balance: proper frequency of irrigation; several applications of fertilizer in the right amounts; and delay of clipping until plants are about 12 inches high.

In the Northwest work, on irrigated pastures seeded to a mixture of Ladino clover and orchard grass, it was found that the right amount of nitrogen does not inhibit clover growth, but helps to produce more clover and more forage. The experiments did confirm, however, that not too much nitrogen must be applied. Applications in excess of 50 pounds per acre accelerate grass growth to the point where clover growth is retarded. The most satisfactory rate, they report, is a total of 100 pounds of nitrogen applied three times during the season. However, since they found a two to four-week lag before fertilizer application shows up in the form of increased yields, nitrogen applications, they suggest, should be staggered in small applications once a month during May, June, July, and August. This will help late summer production, when yields normally fall off.

### **Heinz to Build \$3 Million •Research Quality Control Center**

Plans for the construction of a research and quality control center, have been announced by H. J. Heinz Co. The new structure, to be built at a cost of \$3 million, will be constructed at the company's Pittsburgh headquarters and will serve as the research and development center for the domestic and international operations Heinz.

Construction work on the aluminum, glass, and steel, structure was expected to begin late in September and target date for completion of the seven story building is January 1957.

The building will be erected on the site of the two older structures which

## News of the Month

were recently razed and adjacent to the present administration building. The new center will contain a pilot plant, experimental kitchens, research laboratories, quality control laboratories, and the scientific library of the company's research and quality control division, and also the executive offices of the company.

In the new center all laboratory and research activity will be gathered under one roof except crop research, which will continue at the experimental farms in Ohio.

The pilot plant will be versatile enough to take any product recipe of the experimental kitchens and develop the appropriate processes for factory production, according to the announcement.

### High Analysis Insecticides Studied by Texas A&M

The department of entomology of Texas A&M College has undertaken studies to evaluate new formulations of high analysis insecticides, R. D. Lewis, director, has announced. The evaluations, if successful, will provide more effective control of cotton insects.

The work is being done under a grant from Olin Mathieson Chemical Corp.

### Five-Year Project on Forest Insects Starts at U of Calif.

A five-year project on two of California's most damaging forest insect problems is now getting under way at the University of California. These two are bark beetles, which last year destroyed almost \$9 million of California commercial pine, and insect pests of pine cone and seed. Insect damage to cones and seeds threaten forest regeneration and the establishment of new stands.

The study will be made under a \$50,000 grant from the Gilbert M. Walker Trust Fund. In charge of the work will be Arthur D. Moore, assistant specialist in forest entomology at the Oxford tract of the college of agriculture in Berkeley.

### MH-40 Said to Improve Potato Chips

Potatoes treated with MH-40, maleic hydrazide growth regulator, to prevent sprouting apparently produces crisper, more golden potato chips, according to the Naugatuck Chemical Division of U. S. Rubber, producer of MH-40.

The company reports that Hoff & Co., potato brokers of Wellington, Ohio, unknowingly bought a shipment of potatoes that had been treated with MH-40. Hoff sold the potatoes to a potato chip manufacturer who noted that the shipment produced crisper, whiter chips than ordinary potatoes.

Apparently MH-40 prevents a build-up of sugar in stored potatoes. Sugar, it is said, is formed as potatoes go pulpy in storage and blackens the chips and makes them less crisp. Judd Hoff, president of the brokerage firm, says his company will insist that growers who plan to sell potatoes to the firm for storage use MH-40.

## ASSOCIATIONS

### NAC to Hold Spring Meet in Florida

The National Agricultural Chemicals Association will hold its spring meeting in the Hollywood Beach Hotel, Hollywood Beach, Fla., March 14 to 18, 1956, according to an announcement by L. S. Hitchner, executive secretary of the association.

### Physics in the Food Industry, Subject of Texas Meeting

A symposium on Physics in the Food Industry is being planned for March 15 and 16 at the Plaza Hotel in San Antonio, Tex. Southwest Research Institute and the Institute of Food Technologists are joint sponsors.

Among the subjects to be taken up are ultrasonics, x-ray and gamma ray inspection, electrostatics, dielectric heating, radiation sterilization, and radiofrequency spectroscopy as they could be used in preserving, packing, and processing foods.

John O'Meara of SRI is program chairman. On the planning committee are L. E. Clifcorn, president of IFT, and C. S. Lawrence, executive secretary of IFT.

### Newer Vitamins Subject of Symposium at Vanderbilt

A symposium on the role of some of the newer vitamins in human metabolism

and nutrition is to take place at Vanderbilt University, Nashville, Tenn., on Oct. 21 and 22. The symposium is supported by the National Vitamin Foundation. William J. Darby, director of the division of nutrition, departments of medicine and biochemistry at Vanderbilt, is directing the symposium.

### Nutrition Developments to Be Aired at Public Health Meet

Reports on food and nutrition developments as they affect public health will be presented before the annual meeting of the American Public Health Association in Kansas City, Mo. The meeting is scheduled for Nov. 14 to 18.

Among the subjects on the food and nutrition program are: Problems of child nutrition in Central America and the work of INCAP, foods for the upper age group, new processed foods for the convenience of the consumer, recent advances in the dehydration of foods and their place in the diet, detection of antibiotics in milk, a new approach to nutrition education, and nutritional status of the aging.

W. H. Sebrell, Jr., of the National Institutes of Health will present the paper on child nutrition in Central America.

## PEOPLE

### New Directors for NAC

James D. Hopkins, William J. Liipfert and Loren P. Scoville have been elected to serve five-year terms on the board of directors of the National Agricultural Chemicals Association. Hopkins is president of Hopkins Agricultural Chemical Co; Liipfert is senior partner of Woolfolk Chemical Works, Ltd.; and Scoville is general manager of the chlorinated products division of Diamond Alkali. They succeed retiring members, A. W. Mohr of Calspray; Russel B. Stoddard of Food Machinery; and T. L. Wilkerson of American Cyanamid. W. W. Allen of Dow and Fred W. Hatch of Shell were reelected to second terms as president and vice president, respectively.

G. L. Bridger, fertilizer production consultant and head of the department

G. L. Bridger



of chemical and mining engineering at Iowa State College, has joined Davison Chemical Division of W. R. Grace as director of agricultural research. Vincent Sauchelli, agricultural authority of long association

## CALENDAR

Fertilizer Section, National Safety Council. LaSalle Hotel, Chicago, Ill. Oct. 17-18.

International Conference on the Use of Antibiotics in Agriculture. Washington, D. C., Oct. 19-21.

Symposium on Applications of Radioactivity In Food Processing. Hotel Sheraton Plaza, Boston, Mass. Oct. 19-21.

Symposium on Newer Vitamins. Vanderbilt University, Nashville, Tenn. Oct. 21-22.

World Symposium on Applied Solar Energy. Westward Ho Hotel, Phoenix, Ariz. Nov. 1-5.