

ucts Co. of Kansas City, Mo., manufacturer of a polyoxyethylene monostearate emulsifier similar to MYRJ 45, also has taken legal action regarding the bread order. The U. S. Court of Appeals for the Eighth Circuit also has granted a stay on polyoxyethylene monostearate, pending its decision. Today's ruling by the Supreme Court does not affect that stay, which continues in operation.

"A grossly unfair competitive situation, of course, would arise if another manufacturer of a polyoxyethylene monostearate emulsifier were permitted to continue serving the baking industry, while Atlas is prevented from doing so.

"A statement of the Food and Drug Administration with respect to enforcement of the Bread Order was made recently by Associate FDA Commissioner M. R. Stephens. Speaking to the Society of Bakery Engineers on March 4, 1953, in Chicago, Mr. Stephens stated: 'Pending a final adjudication of the petitions for review filed in the appellate courts, legal action against breads containing polyoxyethylene monostearate is not possible.'

"Meanwhile, the National Research Council, a foremost scientific organization, is now actively considering all available studies and evaluations on the safety of MYRJ 45, including important new evidence completed since the bread hearings closed in 1949. NRC has announced it expects to issue reports concerning the safety of all emulsifiers used in foods.

"Under all of these circumstances, Atlas will continue, until further notice, to sell MYRJ 45 to bakers who desire to use it. We are following this course in the hope that, with the additional time available, a definitive scientific solution to the problem can be reached in the fairest manner to all concerned."

New Norman V. Hayes memorial research and development building of Minute Maid Corp., Plymouth, Fla.



Constructions to Increase IM&C Fertilizer Supply in Tenn. and Ky.

Current high demand for plant foods in Kentucky and Tennessee and anticipated increases are leading International Minerals & Chemical Corp. to expand its Somerset, Ky., plant and to build a new plant at Clarksville, Tenn.

The Clarksville plant will produce complete plant food mixtures on a 32-acre tract north of Clarksville, facing U. S. Highway 41 and extending east to the Tennessee Central Railroad. According to Maurice H. Lockwood, the new plant will place IM&C in a better position for supplying present customers and for serving a more extensive part of western Tennessee and western Kentucky. IM&C plants at Somerset, Ky.; Greenville, Tenn.; Florence, Ala.; and Tupelo, Miss., have been serving this area.

The Somerset factory will be more than doubled, marking a second expansion of this plant since it was built in 1948.

Minute Maid Dedicates Research Lab to Norman V. Hayes

Minute Maid Corp. dedicated its new research and development laboratory building recently and named it for one of the pioneers in the field of concentrates and frozen foods, the late Norman V. Hayes.

The fireproof, air conditioned, concrete block building is located in Plymouth, Fla. Among those present for the dedication in Plymouth were Mrs. Vincent J. Hayes of San Francisco, mother of Dr. Hayes. She and the Florida Commissioner of Agriculture, Nathan Mayo, participated in the formal opening.

Dr. Hayes, as a member of the staff of National Research Corp., went to



Norman V. Hayes

Florida in 1944 to set up a pilot plant and later full-scale operations for producing orange powder. In 1946, just as Minute Maid was beginning to open its first production season, Dr. Hayes was electrocuted at the age

of 28 when he accidentally touched a high tension wire with a steel rod.

Each of the main laboratories in the building contains 700 square feet of floor space. The laboratories are equipped with a Beckman and a Coleman spectrophotometer, a semimicro analytical balance, and Orsat gas analysis apparatus. A small bacteriology laboratory, a chemistry laboratory, a food technology laboratory, and a soil and plant section are all included in the building. Facilities for special projects are also provided on the building's roof.

Foreign

British Evaluating Gas Works' Waste As Source of Fertilizer

The British Ministry of Agriculture is conducting a series of experiments this year to evaluate the use of crude gas works waste as a source of nitrogenous fertilizer. There are about 800 small gasworks in southern England and Wales which do not have sulfate installations. Many of these plants have had difficulty in disposing of crude ammonia liquor which contains from 1 to 2 % of ammonia. For many years continental farmers have used the gas liquor as a direct fertilizer and recently the idea has been extensively tried in England.

The Southern Gas Board disposed of 984 thousand gallons of the material for farm purposes last year. To obtain more direct, exact knowledge, the gas liquor is being tried this year in direct comparison with ammonium sulfate in each of the 12 provinces of the National Agricultural Advisory Service. If the studies prove favorable to the gas works waste the British believe that 15,000 tons or more of nitrogen could be made available for land improvement.

French Potash Imported Duty-Free by Chile

Chile and France have completed negotiations to continue for another year the exemptions from basic import duties granted to potash fertilizers of French origin. Duty-free treatment for French

fertilizer has been in effect for sometime by an agreement between the two governments.

Turkish Planning Domestic Chemical Industry

The Turkish government has recently announced a series of proposals which indicate that they are interested in developing a domestic chemical industry. These include plans for the development of fertilizer and nitric acid plants. The fertilizer plant is expected to cost about \$17 million with facilities for gasification of native Turkish lignite and recovery of ammonia to eventually yield ammonium nitrate, urea, and nitric acid.

Plans are also being developed for superphosphate and sulfuric acid plants to be constructed at Travzone, a port on the Black sea, here estimates call for an initial investment of about \$1 million for the superphosphate plant and about \$3 million for the sulfuric acid plant. The superphosphate capacity is expected to be about 50,000 tons per year.

Present plans are in the tentative stage with the government negotiating with the export import bank for loans to help finance the developments. They are also examining bids for construction and it is expected that more definite news should be available this summer.

German Potash Output Up 19%

Total production of the West German potash industry was 19% above 1952, with the Burbach Kaliwerke A.G. reporting an increase of 32%. The latter company reported a production of 320,000 metric tons of potash with a production capacity of 400,000 tons.

Exports from the West German industry were more than 16% above 1952, however, German domestic sales fell by about 3%.

Education

Wash. State Offers Short Courses for Agriculture Teachers

Washington State College is offering a series of short courses in agricultural science for vocational agriculture instructors and others interested in these fields this summer. In addition to the courses to be offered at the college campus in Pullman, Wash., a series of specialized courses are to be offered at various off-campus locations.

U. of Calif. Opens New Food Labs on Davis Campus

New food and nutrition laboratories were opened at the Davis campus of the University of California when the new home economics building was dedicated March 31.

The laboratories are also equipped for food and nutrition research as well as student use.

USDA Advisory Group Asks Pink Bollworm Control Study

Pink bollworm control investigations and the development of foreign markets for American cotton were two of the recommendations of the Cotton and Cottonseed Research Advisory Committee which met recently at Washington. The committee, composed of leaders in the cotton industry, meets annually to recommend to the Department of Agriculture problems for investigation in the field of production research regarding cotton.

The pink bollworm, formerly confined to the Texas Gulf Coast area, has re-

cently spread at an alarming rate, creating emergency conditions in the cotton growing areas of Texas and parts of Oklahoma, New Mexico, and Louisiana.

Government

Pest Control Group Warns Against Vaporizers in Homes

Recommendations that insecticide vaporizers not be used for insect control in living quarters has been issued by the Interdepartmental Committee on Pest Control. The committee, composed of representatives of the Departments of Agriculture, Defense, Interior, and the Federal Security Agency, meets periodically to consider recommended practices for pest control.

Research

Aureomycin Does Not Affect Growth Action of Vitamin B₁₂

THE GROWTH RATE of female mice fed a diet containing 30% animal protein is not found significantly affected by the addition to the diet of either aureomycin with and without vitamin B₁₂, or by vitamin B₁₂ alone. According to studies by Leonora Mirone, associate professor of nutritional research at the University of Georgia, aureomycin hydrochloride also has no beneficial effect on the growth of male mice fed this same high-protein diet. However, there is a definite growth response in male mice to vitamin B₁₂ during the first five weeks of growth, although this response is not maintained throughout the 10 weeks of test. This appears to indicate that, in the case of the male, either vitamin B₁₂ is not synthesized at a sufficiently rapid rate to meet the demands for optimum growth during the period of very active growth or that the establishment of the necessary intestinal flora requires a longer period of time as compared to female mice.

In the tests carried out by Dr. Mirone, the basal diet was composed of 30% casein, 48% sucrose, 15% lard, 5% salt, 2% alphacel, and was supplemented with adequate amounts of vitamins.

Dr. Mirone has found that aureomycin hydrochloride, with and without vitamin B₁₂ and vitamin B₁₂ alone have no effect on the body moisture, fat, and nitrogen content of the female mice. In the case of the male mice, however, there is an increase in the percentage of body fat and an accompanying decrease in the moisture and nitrogen content

with all levels of aureomycin fed. This effect is augmented by the addition of vitamin B₁₂ to the diet.

The findings emphasize the difference in response to aureomycin hydrochloride and vitamin B₁₂ on the part of female mice as compared to male mice. This difference is worthy of further investigation, said Dr. Mirone, for it may lead to a fuller understanding of the basic differences in the nutritional mechanisms operative in the two sexes. Further work may also indicate a distinct advantage in the simultaneous administration of vitamin B₁₂ along with aureomycin hydrochloride in the treatment of humans or animals suffering from debilitating diseases. Such treatment may also be valuable in cases of extreme emaciation from starvation or nutrition.

Science Foundation Awards 60 Research Grants

The National Science Foundation has approved 60 grants, totaling \$469,550, for research and education in the biological and physical sciences.

Among the grants were several of interest to agricultural and food chemists. C. Tanford of Iowa State College is to receive \$9000 over a period of two years to make a physico-chemical investigation of protein molecules.

A study of the psychophysiology of the chemical senses, by C. Pfaffman of Brown University, will receive a \$16,300 grant.