

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 B<sub>12</sub>

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 B<sub>12</sub>, or by vitamin B<sub>12</sub> 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 B<sub>12</sub> 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 B<sub>12</sub> 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 B<sub>12</sub> and vitamin B<sub>12</sub> 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 B<sub>12</sub> to the diet.

The findings emphasize the difference in response to aureomycin hydrochloride and vitamin B<sub>12</sub> 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 B<sub>12</sub> 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.