

Ag and Food NEWSLETTER

Highest Yet

ONE OF THE important trends in the fertilizer industry is toward higher analysis products (AG AND FOOD, June 10). In step with this is a new 12-12-12 product announced by Allied Chemical and Dye's Nitrogen Division; the company has been working on process for five years, now plans to built \$5 million plant at South Point, Ohio, to manufacture it. Process is said to be continuous and entirely a chemical one—even granulation is done chemically. High nitrogen content is accomplished by substituting nitric acid for sulfuric.

Agricultural Chemicals Future

SOME NEW openings for agricultural chemicals may be getting stronger consideration as a result of the spate of meetings last week: the use of streptomycin against fruit blights may open the South as an orchard region. Repellents for rodents offer the chemical industry an outlet for new products in a field where close attention is relatively new and the annual loss is estimated at between 1 and 2 billion dollars. Fertilizer-pesticide combinations still are a subject of controversy, but some manufacturers are going ahead and there will be considerable production rise next year.

Future Fertilizers

ADDRESSING A MEETING of the American Institute of Biological Sciences in Madison, Wis., last week, Frank Curtis, president of Monsanto Chemical Co., reviewed the development of increasingly complex compounds such as insecticides and predicted a parallel development will take place in fertilizers. Citing the increasing use of urea as a source of nitrogen for farm crops, Curtis said that future research may show that biological availability may prove to be more important than chemical quantity for getting elements into the growing plant. Perhaps compounds duplicating the molecules present within the plant system are the next step.

Campaign Against Bugs

SOME OF THOSE attending the NAC Association meeting in Spring Lake last week were buzzing about plans for celebrating 100th birthday of professional entomology next June. Aim is to "saturate" information media throughout the nation with materials about insect pests. Keynote will be slogan "Know your insect enemies." Not a one-shot affair, it is expected to be opening barrage of a public campaign against insects, with industry and government cooperating to make it effective.

British Oppose Synthetic Sweeteners

USE OF ALL "artificial sweetening substances" except saccharin has been prohibited in Great Britain on recommendation of the Food Adulterants Committee. The Medical Research Council has informed the Minister of Food that on present evidence it regards the use of artificial sweeteners as undesirable for reasons of health. While only saccharin is permitted, the ministry has expressed willingness to consider exemptions from the new ruling of any other sweetening substances shown to be harmless.

Shrimp Cocktail

THE SOUND SCATTERING LAYER of the oceans is not composed entirely of shrimp, according to Sydney R. Galler of the Office of Naval Research. He says it probably contains at least four different types of small marine animals. Previous investigators have been rather generally agreed that the scattering layer is composed of shrimp. Dr. Galler maintains that, although the shrimp are usually present when the echo sounding phenomenon occurs, there is a relatively stable deep layer of life within the oceans which may or may not have the shrimp present (see page 824). Another modification of the sonar device was demonstrated at Madison last week; it will detect individual fish. In fact, the workers there claim it will differentiate size and species; they plan to use it to study habits of fish in wild environment.

Antifreeze for Plants

A RESEARCH TEAM from the University of St. Louis has obtained growth of wheat and pea seedlings after subjecting them to freezing at -200° F. The seeds, which had been allowed to germinate for 24 hours, were treated with ethylene glycol and then frozen in liquid air. When thawed out and planted in an agar medium, the embryo seedlings grew to three and four times the size of unfrozen controls. Research workers emphasize that the seedlings did not develop into full grown plants, but attribute the failure to insufficient penetration of the antifreeze.