# Ag and Food NEWSLETTER

## Insects vs. Bollworms

Another example of pitting natural enemies against insect pests: USDA reports a new wrinkle in combatting the pink bollworm, serious threat to cotton production. A year ago the USDA sent an entomologist to India, the original home of the bollworm, to look for its natural enemies. So far five different species of wasplike bollworm parasites have been sent to the U. S. and reared by the USDA. A quarter million of the parasites were released in bollworm infested southern Texas this summer. A survey next spring will determine how well the parasites have survived the winter. If the operation proves successful, in 1954 the USDA can rear and distribute half a million of the parasites. The insects lay their eggs on the bollworm's body. The larvae hatching from the eggs devour the bollworm, pupate, then emerge as adult insects to lay more eggs. One species of parasite requires less than two weeks to complete its life cycle.

# Virus vs. Caterpillars

Biological control of caterpillars, a periodical problem on western range lands, seems likely on the basis of work now under way at the University of California. Artificial infection with a virus against alfalfa caterpillars was used for the first time on a commercial scale in California's San Joaquin Valley this summer. Virus, extracted from the dead caterpillars, was found to be effective in destroying 80 to 95% of the caterpillars when sprayed on the fields at the rate of one milliliter per acre. U. C. researchers are also investigating bacterial control. They are attempting to culture bacteria in their laboratory which will infect and control insect pests.

#### Fungistatic Antibiotic

A NEW ANTIBIOTIC, oligomycin, may find use in combatting plant diseases. Its discoverers at the University of Wisconsin, stress that it is still too early to make any definite statements about the value of the materials; however, the antibiotic isolated from cultures of *Streptomyces* is active against the fungi which cause root rot in potatoes and other root crops and also the causative agent of bitter rot in apples. A unique property: The antibiotic has no activity against bacteria, but is active against fungi pathogenic to both animals and plants.

# Animal or Vegetable Ice Cream?

 $T_{\rm HE}$  use of vegetable oils as replacements for milk products in ice cream and other frozen desserts, rapidly gaining headway in Texas, Oklahoma, Illinois, and Missouri, has the dairy industry worried. Spokesmen at the National Milk Producers annual meeting in Houston, Tex., say that the use of the substitutes constitutes a serious economic menace to their industry. In the states above, more than 12% of the traditional ice cream market has been taken away by vegetable oil competition. The milk producers federation has launched a fight to prohibit interstate sale of the products; legislation of a restrictive character has already been passed in eight states.

#### Big Freeze Moves East

California, which only four years ago dominated frozen food production with 80% of the national total, is gradually losing prominence. Processors springing up to serve local markets are competing with California products. Meanwhile, national growth of the industry continues at 25% increase per year. A big selling job with grocers looms if this rate of expansion is to be maintained. Grocers' display cabinets have developed as the major bottleneck. Major vegetables and fruits must compete for cabinet space with specialty and novelty items. Producers report that the cabinet bottleneck has limited the amounts of vegetables and fruits sold and has discouraged introduction of new products.

## California Cotton Prices

California cotton growers are still hopeful that Congress will make changes in acreage control laws when it reconvenes in January (Ag and Food, Sept. 30, page 905, and Oct. 28, page 967). The problem cannot be simply solved by planting the 700,000 acres which have been in cotton to other crops. An estimated 300,000 acres can be diverted to field crops, such as barley, corn, and alfalfa. These crops are not price supported and farmers are fearful about their income from these substitutes. However, the remaining 400,000 acres, which was originally reclaimed from arid land specifically for cotton, is not suitable for diversion to other crops. The water wells used for irrigating this reclaimed land supply brackish water, all right for cotton but not for many other crops. Californians say that if the controls on acreage go through as planned it could result in a 10% loss in the total state income.