

Research Newsletter . . .

New Fungistat for Citrus Shipping

University of California has new fungistat for use to prevent mold formation on citrus fruits en route to market. The fungistat is a combination of ammonium chloride or sulfate with magnesium or calcium oxide pelletized with asbestos or bentonite and a dehydrating agent. An alternate approach uses organic acids. When exposed to the high humidity in citrus shipping containers, **pellets release ammonia**. Biphenyl, used for same purpose, has odor objectionable to some consumers, so university was asked to find another. New fungistat cannot be used until transcontinental shipping tests are made and approved by FDA. **University plans to patent** the material and license manufacturers.

Developments in Pest Control

USDA's interference with the sex life of bugs continues. Having eradicated the screw worm from Curacao with sterilized males, it now is sending specialists to Yugoslavia to collect a **sex attractant from female gypsy moths** for use in luring male moths into traps. . . USDA's experimental F-17, a mixture of antibiotics, **shows great promise against bean rust**.

Mediterranean Fruit Fly in Florida

The "medfly," one of the world's most destructive pests of citrus and other fruits and vegetables, has been found **in Florida, near Miami**, where little fruit is grown commercially. Quarantine measures are being considered. Detection traps have been set from Texas to Florida. **USDA officials are optimistic about eradication**. They did it effectively in 1929-30. Ethylene dibromide or methyl bromide fumigation or vapor-heat treatment has been used successfully on fruit from Hawaii, from which fruit shipment has been regulated by quarantine since 1914.

Antioxidant Withdrawn from Feed Use

The basic manufacturers of DPPD—Naugatuck and Goodrich—have voluntarily withdrawn it from the poultry feed market, because of recent findings that it causes pronounced **toxic effects when fed to pregnant rats**. DPPD (diphenyl-*p*-phenylenediamine) has been used in substantial quantities for the past two years as an antioxidant to **protect the vitamin E content of poultry feed**. Earlier studies indicated it was harmless. FDA has recommended to basic manufacturers and distributors that unused quantities of the chemical be returned.



- Report on vitamin and mineral content and composition of frozen foods based on tests of 27,562 individual packages (p. 418)
- High-alumina nitric phosphates are as satisfactory as concentrated superphosphate for long-season crops but are poorer for early growth or starter (p. 432)
- Studies of the vegetation in six Atlantic Coastal Plain areas are used to estimate the cobalt, copper, manganese, and phosphorus in these areas (p. 439)
- Chromatographic methods agree with bioassay and show little heptachlor and chlordan residues (p. 444)