New Systemic Launched

New **contact and systemic insecticide**, introduced by Shell Chemical and given USDA's experimental label acceptance for use on certain fruit and vegetable crops, can be used up to one to three days before harvest. Known during development as OS 2046 (Ag AND FOOD, March, page 236), now trade-named Phosdrin, the organic phosphate is highly toxic to man, but **dissipates rapidly**; residue levels generally fall below 1 p.p.m. within 24 hours. Formulators will have limited quantities in emulsifiable, dust, and granular forms for use on late summer and fall crops.

Nitric Acid Without Fumes

Contract for design and construction of the Texas Co.'s **200-tons-per-day nitric acid plant** at Lockport, Ill., has been awarded to Chemical & Industrial Corp. of Cincinnati. C&I will also build Texaco's 274-tons-per-day **nitrate solutions** plant, based on a CSC Stengel reactor, to go on stream in 1957. Acid plant will be equipped with C&I's new **fume eliminator** to remove oxides from exhaust gases, bringing to four the number of such units C&I has sold. Others are at plants of Brea Chemical, Standard Oil (Calif.), and St. Paul Ammonia Products.

Versatile Malathion Approved for Mosquitoes

Malathion, growing in popularity because of its relative safety, wide range, and high rate of insect kills, has won USDA approval for control of **mosquitoes.** Experimental spraying programs in California and Florida during past two years have produced excellent results, with kills closely approaching 100% even on strains resistant to DDT and other control agents. Previously accepted by USDA for control of nearly 100 farm, home, and garden insect pests, malathion has been spotlighted recently in battle against Medflies infesting southern Florida.

Food Additives on Trial

Meeting in Rome in August, International Union Against Cancer is reported to have adopted—subject to approval by IUAC's executive board—a resolution labeling as **possible carcinogens** 20 groups of **food additives** and 17 groups of **contaminants**. Food dyes received heaviest fire, with 29 classed as "unsuitable" or "potentially dangerous." Among preservatives, thiourea, thioacetamide, 8-hydroxyquinoline, and hydroquinone were called dangerous, ethyl and butyl esters dubious. Other groups singled out include thickeners, bleaches, shortening substitutes, antioxidants, antibiotics, estrogens, and packaging materials.

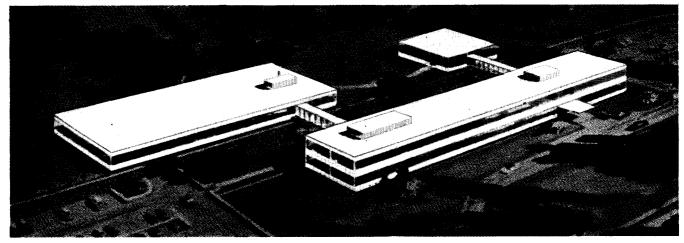
Spotlight

- Ammonium sulfate, formerly the preferred carrier of nitrogen for mixed goods because of its handling properties, has fallen victim to the onslaught of granulation (p. 737)
- Placement of a herbicide as well as its chemistry may affect its selectivity (p. 738)
- Trends toward higher ammoniation, granulation, and liquids raise the question of water solubility of phosphates, important under some growing conditions (p. 740)
- Pesticides sales better this year than last sums up findings of AG AND FOOD field staff (p. 762)

New Home of Geigy Agricultural Chemicals

• Geigy Agricultural Chemicals' modern new headquarters now combine administrative offices, service facilities, and chemical research and development laboratories.

All of these facilities in one location constitute another step forward to serve you better and more efficiently.



GEIGY AGRICULTURAL CHEMICALS • Division of Geigy Chemical Corporation • Saw Mill River Road, Ardsley, New York Mail address: P.O. Box 430, Yonkers, New York Telephone: HAstings 5-8211

DIAZINON

The most effective residual fly control chemical available. One spraying kills flies from 4 to 6 weeks.

METHOXYCHLOR

General purpose insecticide. For control of insect pests of livestock, crops, and stored grain. Safe to use. Long residual action.

CHLOROBENZILATE

Safe, effective miticide. Controls mites on apples, pears, citrus, and ornamentals. Long residual action.

SEQUESTRENE[®]

Original iron chelates for correction of iron deficiency (chlorosis) in ornamentals, fruit trees, vegetables, and turf. *STOUSTRING" is the brand name for metric chelates and by Delety Arrivelitari Iomenal, Dubling of Guge Chemical corporation

DDT

Controls a variety of insect pests of man and animals. Equally effective against many insects attacking ornamentals and agricultural crops.



GEIGY AGRICULTURAL CHEMICALS . Division of Geigy Chemical Corporation . Saw Mill River Road, Ardsley, New York -

Melon Fly Captured

First live melon fly ever captured in the United States was taken on UCLA campus in August, and its identity has been officially confirmed. Authorities have rushed 3000 traps to the area to determine if an infestation exists. In California alone, crops threat-ened are worth \$25 million.

Forest Pest Control

USDA's Forest Service has consolidated all its control work on **forest insects and diseases** in its new Division of Forest Pest Control. Division will be under general supervision of assistant chief of Forest Service in charge of cooperative programs, William S. Swingler, who notes that insects kill outright seven times as much timber as fire does, and diseases three times as much. Forest pest control stands today where forest fire control stood 25 years ago, Swingler says.

Partial Victory Over Smut

Hexachlorobenzene as wheat seed treatment has given **first satisfactory control** over soil-borne spores of common smut (bunt). In combination with smut resistant new wheat varieties, Omar and Columbia, HCB gives Pacific Northwest wheat growers potent weapon against disease that costs them millions of dollars each year. While not 100% effective, HCB is said to be four to seven times as effective as standard mercury treating materials used for many years.

Cooperative Research, South America

Economies of **South American countries** should benefit significantly from stepped-up agricultural research. Olin Mathieson's Chemicals International Division, after surveying soil and crop conditions in many countries, is establishing **joint research pro-grams** aimed at improving soils, cultivation practices, and protection against plant diseases. Coffee gets chief attention in Brazil, with emphasis on high analysis fertilizers, better irrigation, and chemicals (especially antibiotics) for disease control. In Peru, broad programs will cover disease and nutritional problems of cotton, rubber, tea, coffee, potatoes, cacao, and pasture lands.



- Good organophosphate insecticides balance group specificity, antiesterase activity, and stability in a way that varies for each economic use (**p. 772**)
- Rapid method uses Karl Fischer reagent to monitor moisture content of ammonium nitrate during manufacture (p. 786)
- Chemical entities, probably end products of microbial digestion of feed, not coarse materials, are believed to stimulate development of rumen in calves (**p. 788**)
- DPPD, recently withdrawn for use as animal feed antioxidant, or some of the impurities in it found to induce prolonged gestation in rats (**p. 796**)