

# Business Newsletter . . .

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## **Pesticide Expansions**

**Monsanto will enlarge the area in which it sells farm chemicals under its own label** from 18 states to 35. New areas are the Atlantic States, as far south as Virginia, and the Northwest. Company says expansion is result of its success with this marketing method in the Midwest. **New herbicides Vegadex and Radox** will be among products it offers this season . . . **Naugatuck Chemical** is tripling laboratory and office space at its Bethany, Conn., **agricultural chemical research station and experimental farm.** Farm includes eight acres of orchard and experimental plots for row crops.

## **New Facilities for All Three Plant Foods**

Basic facilities for all three of the major plant foods began operation in mid-February—the **nitrogen from Southern Nitrogen's** \$14-million plant at Savannah, Ga.; the **phosphorus from USI's** phosphoric acid plant at Tuscola, Ill.; and the **potassium from National Potash's** new mine and refinery at Carlsbad. Southern Nitrogen can turn out **250 tons of ammonia a day**, and expects to be making nitrogen solutions and solid ammonium nitrate by April. USI's plant will be able to produce **30,000 tons of P<sub>2</sub>O<sub>5</sub> a year**, using the Prayon Process (see page 161) for wet process acid. National Potash, owned jointly by Freeport Sulphur and Pittsburgh Consolidation Coal, has a capacity for **400,000 tons of high grade muriate a year.**

## **Predict Good Year for Fertilizers, Pesticides**

Just-completed survey by **Doane Agricultural Service** indicates U. S. farmers will buy **1 million tons (4.7%) more fertilizer in 1957** than in 1956. Similar survey last year, covering cross-section of the nation's farm families, successfully—almost quantitatively—predicted drop in consumption for 1956. **Pesticide consumption also should be up** from last year, especially in brush killers and pre-emergence weed sprays. Doane says **25% more survey respondents plan to use brush killers in 1957**, and **36% more plan to use pre-emergence weed sprays.**

## **Prices: More Up Than Down**

**Stronger price trends mark superphosphate, phosphate rock, and toxaphene**, while copper sulfate has gone down. One producer in the Philadelphia area advanced **46% superphosphate** from \$1.20 to \$1.23 per unit, probably reflecting recent upturns in Florida phosphate rock. Further increases are expected in the latter as a result of higher fuel oil costs. Toxaphene is one cent higher at 22 cents per pound, drums, carlots, or truckloads, with less than carloads 28 cents. New basis for **copper sulfate crystals, fungicides**, is \$12.90 per 100 pounds, resulting from the metal's nose dive to 32 cents per pound.



- Seriousness of soybean cyst nematode focuses attention on methods of control. Research pushes hard to find suitable chemical methods (**page 159**)
- New phosphoric acid plants in U. S. are using two European processes, the Prayon and St. Gobain methods (**page 161**)
- Signs are that pesticide industry is reconsidering its traditional policy of secrecy about production and consumption data (**page 162**)
- Extensive data on fertilizer use in 1954 Census of Agriculture give industry good basis for planning (**page 162**)

# Research Newsletter . . .

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## **Aphid Problem Takes Turn for the Worse**

Resistance to previously effective pesticides has appeared in spotted alfalfa aphid, fastest-spreading insect pest ever to invade this country. First signs of failure of parathion, and possibly malathion, were reported in February by entomologists at University of California. Thus far, resistance problem has appeared mainly in Mojave River Basin and Imperial Valley, to a smaller degree in Antelope and Coachella Valleys. Aphid is now active in at least 30 states, has caused extensive damage in 11. **Research is being accelerated** to achieve control through better insecticides, including systemics, through development of resistant alfalfa strains, or through biological agents such as diseases, predators, or parasites.

## **One-Step Triple Super**

TVA is developing a new **one-step process for making granular triple superphosphate**. Process uses the TVA ammoniator-granulator as an acidulating drum, in which phosphate rock and phosphoric acid are simultaneously mixed and rolled into pellets. Product requires no drying, moves directly to storage where reaction goes to completion in about a week. One-step process would permit fertilizer manufacturer to make his own superphosphate, and then **use the same equipment for producing mixed fertilizer**.

## **Insect Attractants, Repellents Gain in Importance**

**Protein hydrolyzate baits** impregnated with malathion are luring walnut husk flies to their death in southern California, reducing nut infestation from 29% to 2%. **Iso-propyl ester of 6-methyl-3-cyclohexene-1-carboxylic acid**, synthetic replacement for rapidly dwindling angelica oil, has virtually saved the day as attractant in continuing battle against Medflies in Florida. **Diethyl toluamide**, described by USDA and Department of the Army as the best all-purpose insect repellent so far developed, has just been released for commercial use. It can be safely applied to skin or clothing, and provides long-lasting protection—double that of the best previous repellent—against mosquitoes, chiggers, ticks, fleas, and biting flies.

## **Technologists a Growing Need in Agriculture**

**Shortage of technically trained personnel** draws increasing attention from agriculture and industries which serve it. Special committee of the President's Commission on Increased Industrial Use of Agricultural Products gave the problem major attention at its February meeting, citing need for more trained brain-power to meet increasing demands for research on farm-product utilization. At University of Arizona college of agriculture, Dean Harold E. Myers said earlier that the country annually needs **15,000 college-trained agricultural technologists** alone, including 2000 as farm managers, 4500 in industries serving agriculture (fertilizer, pesticides, seeds, farm equipment), 3000 in education, 1000 each in research and communications.



- L13/59 and its acetyl derivative are tagged with phosphorus-32 to study reason for the insecticide's low mammalian toxicity (**page 186**)
- Cotton seeds treated with Thimet showed less than 0.03 p.p.m. of Thimet or its metabolites in seeds maturing from the treated plants (**page 192**)
- Infrared techniques used to evaluate residues of Mitox acaricide on pears (**page 198**)
- Increasing proportions of water-soluble phosphorus in fertilizers resulted in significantly greater yields and phosphorus uptake (**page 217**)