Business Newsletter...

Step-up in Fertilizer Materials

Bear Creek Mining Co., subsidiary of Kennecott Copper, is seeking mineral rights on 250,000 acres in Beaufort County, N.C., where phosphorite deposits have been found to underlie about 450 square miles. Phosphorite column is up to 90 feet thick; P₂O₅ content ranges from 8 to 31%...U. S. Steel is on stream at its Geneva Works with 200-ton-per-day plant to produce ammonia, nitric acid, and ammonium nitrate from coke oven gas... Spencer Chemical, already producing urea at Vicksburg, Miss., will build 100-ton-per-day urea unit at Henderson, Ky. Prilled urea will be added to the company's product line.... Atlas Powder expects to be on stream by March with \$4-million, 250-ton-per-day nitric acid and ammonium nitrate works at Atlas, Mo. Acid plant, being built by Chemical & Industrial Corp., will be first in the U. S. to supply all its energy needs through recovery of heat from burning of ammonia. Provision for some nitrate capacity beyond Atlas' own needs could portend company's entry into fertilizer field, at least as a materials supplier... Mississippi Chemical's fifth high-pressure nitric acid plant, also to be installed by C & I, will provide additional 150 tons per day of acid capacity at Yazoo City.

New Pesticides, New Registrations

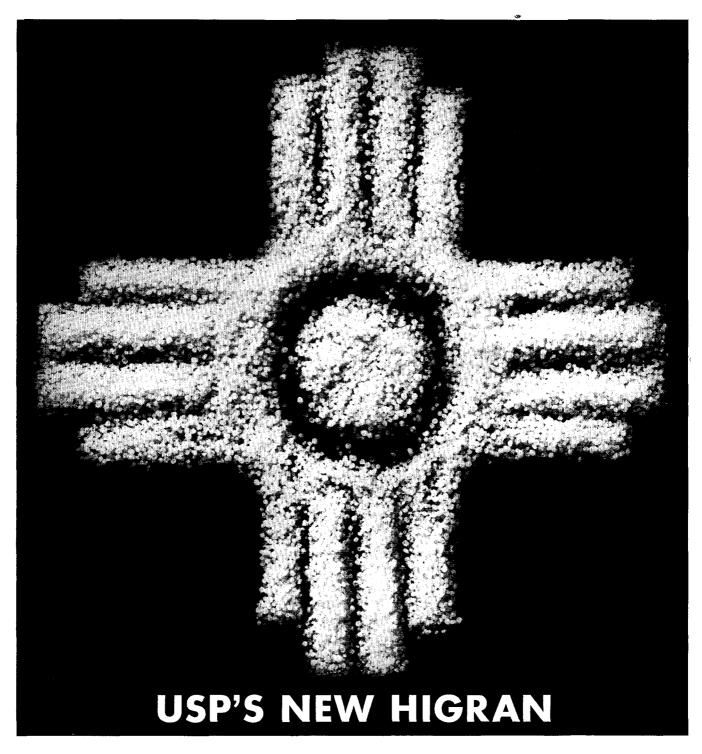
General Chemical Division, Allied, is marketing its new herbicide, hexachloroacetone, under trade name of HCA weed killers. So far recommended for use only in noncrop areas, HCA is said to eradicate weed grasses with a single application. . . . After extensive field testing, Hercules Powder is making Delnav (formerly Hercules 528) available in limited commercial quantities. It controls leafhoppers, thrips, mites, (eggs as well as adults), and leaf miners. . . . Stauffer Chemical's Trithion has been granted registration for nonresidue use in control of mites and insects on cotton, seed crops, and deciduous orchards (postharvest). . . . Geigy Chemical's Diazinon has been approved for use on apples, pears, and cherries, to control apple maggots, coddling moths, aphids, scale crawlers, and other pests. . . . USDA has revised its recommendations for use of toxaphene on livestock, in line with FDA's tolerance of 7 p.p.m. in fat of beef cattle, sheep, and goats. Important restriction: treatment must be discontinued four weeks before slaughter.

Potash Dumping Protested

Potash industry is up in arms against dumping of potash in the U. S. by German, French, and Spanish interests. Domestic producers told the House Ways and Means Committee some segments of the industry will be wiped out unless Congress provides enforceable protection. Foreign supplies, they claim, are offered on Atlantic Seaboard and Gulf Coast at prices much below the cost of domestic supplies.



- House committee expected to approve administration's food additives bill, one that would give FDA licensing power over new products (page 560)
- Spencer and Monsanto have pilot plants operating to get the answers to <u>problems of</u> granulation and high analysis for fertilizer formulators (**page 561**)
- Despite many new problems raised by Miller Amendment, industry feels, after one full year of operating under it, that it will benefit industry (page 562)
- Something to look forward to—1962, the year when nitrogen demand will match capacity to produce (page 574)



SPECIALLY SIZED PARTICLES FOR MODERN FERTILIZERS

USP announces the FIRST Higrade Granular muriate of potash designed specifically for the manufacture of today's modern fertilizers. Its perfect whiteness attests to its purity—the highest now available in granular agricultural muriate of potash. Non-caking and free-flowing throughout, USP's new Higrade Granular potash contains 62/63% $K_2O!$ A regular supply of this important new potash product is immediately available from the U.S. Potash Co.

USP also offers Higrade muriate of potash—62/63% K_2O and Granular muriate of potash—60% K_2O —both free-flowing and non-caking.

UNITED STATES POTASH COMPANY

DIVISION OF UNITED STATES BORAX & CHEMICAL CORPORATION 50 Rockefeller Plaza, New York 20, New York Southern Sales Office: Rhodes-Haverty Building, Atlanta, Georgia



Research Newsletter...

New Materials

An antibiotic that prevents southern bean mosaic virus and tobacco mosaic virus is being probed by Merck. Called Cytovirin, it was isolated by Merck research from culture filtrates of unidentified *Streptomyces*. Report of preliminary work in July 15 *Plant Disease Reporter* says it is the "most potent agent encountered as yet for combating local lesion and systemic plant virus infections." . . . Union Carbide is offering Sevin, formerly experimental insecticide 7744, to federal, state, and other agencies for research. The aryl urethane holds promise against more than 35 insects, including the pink bollworm, and apparently will rank among the safer insecticides . . . Hooker tells stockholders it has a new insecticide and a new herbicide, but gives no details.

Signs of the Times

Three developments last month add up to a greater concern by the food industry with chemicals for agriculture: United Fresh Fruit and Vegetable Association and 26 other industry organizations petitioned FDA to abolish regulation requiring fresh fruit and vegetables treated with chemicals after harvest to be so labeled when the chemicals were used in accordance with regulations concerning tolerances. . . . Wisconsin Agricultural Experiment Station reported on flavor tests of nine canned vegetables that got applications of seven chlorinated hydrocarbons during the growing season. Only toxaphene caused no off-flavors however it was applied. Only snap beans and tomato juice developed no off-flavors with any of the insecticides. . . . Foliar applications of urea solutions (Du Pont's NuGreen) to winter wheat not only increased yield, but also increased protein content of the flour and consequently the loaf volume of bread baked from it by significant values. In studies conducted by Kansas State Agricultural Experiment Station and USDA (reported in the July Agronomy Journal) a number of sprayings throughout the fruiting period increased wheat protein from 10.8 to 21%.

Chemicals into the Woods

Weyerhaeuser Timber's research foresters, near Yacolt, Wash., report they have increased seed cone production of Douglas fir sixfold by applying soil nutrients. Such results could boost productivity of the Pacific Northwest's forest land by as much as 10%. With present methods, tree farmers in that area expect to get enough seed to reforest harvested lands only three years out of every ten. . . . Crag Mylone is being tried by 70 forest tree nurseries around the country for control of weeds, nematodes, and soil fungi in seed beds. Chief target of nurserymen is "damping-off" disease.



- Process for making fertilizers from Florida leached-zone phosphate ore, and recovering uranium conveniently at the same time, is successful in pilot plant (page 587)
- Rohm & Haas' experimental acaricide, FW-293, was effective against citrus red mite and several other mites that infest citrus groves in California (page 592); although residues persist, only negligible amounts were found in edible fruit (page 595)
- A rapid way to detect small amounts of insecticides of the sulfur-containing phosphate ester type involves paper chromatography (page 601)
- Further data from the nutritional study of frozen foods—this report on the amino acid content of nine frozen vegetables (page 608)