

Business Newsletter . . .

California Sulfur Deficiency

Sulfur, long recognized as a plant nutrient, is now being **found to be deficient in many California soils.** Reports have been accumulating the past two or three years, mainly as a result of expanding range fertilization experiments, while some sulfur deficiencies are being found on farm lands, too. Agronomists expect similar reports when range fertilization work is extended to balance of West. **Prospect is for boost in sales of ammonium sulfate** or, where nitrogen is not needed, gypsum.

New Fertilizer Plants

Escambia Bay Chemical Corp. dedicated its new \$25 million nitrogen plant at Pensacola, Fla., Feb. 17. Daily capacities: 200 tons anhydrous ammonia, 220 tons 100% nitric acid (as 56% water solution), 275 tons of 100% ammonium nitrate, and 350 tons of prilled ammonium nitrate. . . . **Nitrogen Division of Allied Chemical & Dye** will install facilities at Hopewell, Va., for solid ammonium nitrate (33 $\frac{1}{3}$ % N). Also expects to have new nitrogen fertilizer facilities at Omaha, Neb., ready to produce for the spring demand.

Plans across the Nation

Cominco Products, Inc., Spokane, Wash., has been formed to expedite delivery of fertilizer produced by **Consolidated Mining & Smelting Co.,** for which sales are handled by **Balfour, Guthrie & Co.** One million dollars' worth of new storage facilities for liquid and solid fertilizers, with room for expansion, plus existing U. S. facilities, is expected to eliminate delay in getting fertilizer from Canadian plants. . . . **Arkansas Farmers Union** has announced it will build multimillion dollar plant for fertilizers and agricultural chemicals. . . . **Swift & Co.** will begin construction soon on a new plant food factory at Pompano Beach, Fla. A full line of its plant foods including Vigoro products will be made there.

Foreign Developments

An official **Polish** government release says that nitrogen fertilizer output in that country last year totaled 1,153,000 tons of nitrogen, as compared with 74,700 tons in 1950. Also says 50 million tons of sulfur has been discovered. Last year's output of sulfuric acid made possible an 80% increase in phosphorus fertilizers over 1949. . . . The **British** have seasonal fertilizer problems too. The Fertilizer Manufacturers' Association says three quarters of Britain's annual consumption is applied in one quarter of the year. A campaign is in progress to stimulate early purchase.



- Foreign aid helped push fertilizer exports up to new high of nearly \$95 million (p. 193)
- Are agricultural chemicals manufacturers overlooking an opportunity in virus control of insects? (p. 195)
- Weather data being used successfully to predict crop maturity and attacks from insects and plant diseases (p. 197)
- W. B. Rankin of FDA answers questions posed by industry on implementing the Miller Pesticides Amendment (p. 214)



Meet The Demand For High Analysis

Use

DAVISON'S TRIPLE Superphosphate

State Agricultural Experiment Stations and other authoritative sources are recommending fertilizers with ever increasing plant food units per ton. High analysis fertilizers are in demand because they give more for each fertilizer dollar. Meet this demand by incorporating Davison's New Triple Superphosphate in your formulation.

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Research Newsletter . . .

Multipronged Approach against Alfalfa Aphid

All available techniques of insect control are being directed against the spotted alfalfa aphid in California where last year it cost farmers \$13 million in crop damage and control expense. **Aphid parasites are being reared** at the University's Riverside campus. Parasites are Mediterranean and Near East wasps which lay eggs in the aphids. **Malathion and parathion are being recommended** for hay crops, while Systox is recommended for seed fields to avoid killing bees. Two aphid-resistant strains of alfalfa are being developed and should be ready in about six years.

Beet Pest Progress

Insecticide-fertilizer mixtures have been giving good results against **beet root maggot** according to reports from North Dakota Agricultural Experiment Station. Combinations of heptachlor, aldrin, or dieldrin with 0-46-0 fertilizer were used . . . Another paper at the recent meeting of American Society of Sugar Beet Technologists reported that USDA workers at Phoenix, Ariz., effectively used systemic insecticides applied to seeds to control **beet leafhoppers** until the plants were up to the four-leaf stage. Control of leafhopper with DDT, at USDA's Sacramento, Calif., location, is given major credit for sharp reduction of spread of **curly-top virus**.

Insects and Chemicals to Control Weeds

USDA Entomologist G. B. Vogt will go to North Africa and the Near East this spring in search of insect enemies of noxious weeds, including **halogeton and its relatives**. Halogeton is an Asiatic weed that poisons sheep and sometimes cattle. It grows on poor soil and presently recommended chemical control is comparatively expensive . . . Preliminary reports from Oregon State College and Virginia Polytechnic Institute indicate that aminotriazole is giving excellent **control of Canada thistle** . . . Diallyl-acetamide, new weed control agent being introduced under the trade-name Radox, is the most promising pre-emergence **treatment for foxtail**, a plant now choking corn and soybean plants in Illinois, according to University of Illinois reports. Corn and soybean have a very high tolerance to this chemical.

New Forage Crop

Elephant grass, a 15-foot, robust, palatable **perennial grass resembling sugar cane**, is showing promise and finding acceptance in the Rio Grande Valley, according to Southwest Research Institute. One acre can produce over **121,000 pounds per year of green forage** suitable for silage. It requires heavy fertilization, particularly with nitrogen, and plenty of water. But according to Southwest, total growing cost is less than \$1.00 a ton, including land rent.



- Analytical methods for determining residues of schradan (p. 230) and dimefox (p. 233)
- Toxic residues of Shell Chemical's systemic, compound OS 2046, dissipate within two days after application at levels used for insect control (p. 236)
- Ammonium metaphosphate—produced in pilot plant by reacting phosphorus pentoxide and ammonia at 600° to 1000° F.—shows effective fertilizer potential in greenhouse tests and 90% plant food content (p. 248)
- Cathode radiation to sterilize barley malt for use in converting distillery grain mashes not considered commercially practical (p. 260)