#### Hercules Doubles Size of Urea Plant for California

Hercules Powder Co. says it will double its capacity for the production of urea at its Hercules, Calif., plant.

Two months ago Hercules disclosed plans to construct a 10,000-ton-a-year facility to make urea in solution at a new plant to be built adjacent to existing anhydrous ammonia facilities at Hercules.

In response to increased demands from agricultural and industrial users of urea, directors of Hercules have approved expansion of the plant under construction so that it would have a capacity of 20,000 tons a year.

Using the Swiss Inventa process, Hercules will have the first plant west of the Mississippi, and the third in the nation to produce urea by this method. Completion of the expanded urea facility is expected in the fall of 1958.

The urea unit will utilize ammonia and carbon dioxide as raw materials, both available at the existing plant.

For agricultural use the plant will produce a new Hercules product, UN-32, a urea nitrate solution. UN-32, which has been manufactured by Hercules using ammonium nitrate made by the existing plant, is a high nitrogen content liquid.

UN-32 requires no pressure for storage, has no volatile ammonia, and contains 32% nitrogen. The product is being used extensively to accelerate decomposition of crop residues, and also as a carrier for weed killers such as 2,4-D, providing plant food at the same time it destroys unwanted growth.

UN-32 can be applied with any of the common types of spray equipment, and for large scale applications it can be sprayed from airplanes.

J. M. Martin, general manager of Hercules' Explosives Department which operates the plant, said the urea facility is part of the planned continued expansion at the Hercules plant, and a further diversification of nitrogen products which have been made there since 1932.

#### Monsanto to Build Urea Plant at El Dorado

Monsanto will construct a urea plant at El Dorado, Ark., it announces. Construction of the plant, which

Construction of the plant, which will have a capacity of 100 tons a day, will get under way before the end of the year. It is expected to be on stream by early fall of 1958. The new facility will produce urea in both prill and solution forms. Ammonia and carbon dioxide, both raw materials for the manufacture of urea, are made at the inorganic division's El Dorado chemical plant.

The new plant will enable Monsanto, already a large supplier to mixed fertilizer manufacturers, to expand its services to the fertilizer industry, particularly in the fields of urea solutions and direct application liquid and solid nitrogen fertilizers. Urea also is an important ingredient in mixed feeds for ruminants.

In addition, Monsanto's plastics division uses urea for the production of urea formaldehyde resins.

#### **Cowles Chemical Producing DET**

Cowles Chemical Co. of Cleveland, Ohio, is now producing diethyl toluamide, the insect repellent developed by the Army Quartermaster Research Laboratories and USDA earlier this year, according to Frank F. Black, manager of organic chemical sales.

Black states that Cowles has been conducting research and development work on DET for over a year, and that a new installation of specially designed equipment is now on stream turning out substantial quantities of a highly purified DET at the company's Skaneateles Falls, N. Y., plant.

He said that at present Cowles is manufacturing a product with a minimum meta isomer content of 95% shipped under the trade name Detamide 95. Later it plans to offer a product of 85% meta content, to be known as Detamide 85.

#### FRL Changes Name to Food And Drug Research Laboratories

The corporate name of Food Research Laboratories, Inc. has been changed to Food and Drug Research Laboratories Inc., it is announced by Bernard L. Oser, director.

Purpose in changing the name under which the laboratories have operated since their founding is to reflect more accurately the scope of the activities of the laboratories as they have developed over the past 35 years, Dr. Oser stated.

Since the drug aspect of the laboratories' services has become as great as its activities in the food and related fields, a long deferred decision to change the name to Food and Drug Research Laboratories Incorporated was made at this time.

The name change coincides with the company's move to larger quarters

to accommodate its expanding research, development, and product evaluation projects. Enlarged animal quarters and special facilities for isotope research are being installed. A building at Maurice Ave. at 58th St. in Maspeth, New York City, is now being readied for occupancy next month. It will almost triple the space of the laboratories' previous facilities in nearby Long Island City.

#### Monsanto Building New Facilities For Ag Chemicals Research

Construction has begun near St. Louis on new, expanded laboratory and greenhouse facilities for agricultural chemicals research by Monsanto's organic chemicals division.

The new research unit is being constructed in suburban St. Louis adjacent to the new corporate general offices recently occupied by Monsanto. In addition to the most modern equipment for research on agricultural chemicals, it will provide accommodations for a future 75% increase in personnel assigned to these programs.

Scheduled for occupancy in mid-1958, the new facilities will include a modern two-story building to house offices, conference rooms, laboratories, and library. Adjoining it will be eight greenhouses and one-story material receiving and storing accommodations. The structure will occupy 15,000 square feet exclusive of greenhouses.

The new laboratories and greenhouses will be devoted exclusively to research-scale experimentation.

Work has been expedited on the new research unit as replacement for present accommodations near the junction of Lindbergh and Olive Street Road. The present facility is being condemned by the state highway commission to make way for a new modern overpass and traffic interchange at the intersection.

#### Spencer Opens Research Center

Spencer Chemical dedicated its new research center near Kansas City late in October. The three-building center includes a greenhouse for biological research. Other buildings are the main building, which houses administrative offices, library, conference and cafeteria facilities, and 27 laboratories, and the process laboratory building.

At the dedication ceremonies, a bronze plaque recognizing the "contributions to and continuing interest in research" of Kenneth A. Spencer, company president, was presented to



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him. It will be mounted in the lobby of the center directly across from a plaque listing the winners of the Charles F. Spencer Award in Agricultural Chemistry.

Spencer's laboratories were formerly located at the Jayhawk Works near Pittsburg, Kans.

#### Monsanto Ships Ammonia By Barge from El Dorado

Monsanto Chemical's El Dorado plant achieved a "first" recently by shipping anhydrous ammonia by barge on the Ouachita River. Ammonia was transported by Wheeling Pipeline Co. in high-pressure tank trucks from the El Dorado chemical plant to the company's dock at Champagnolle. A total of about 60 truck loads was required for the shipment. The barge, which is leased by Monsanto, has capacity for 840 tons of ammonia in its six high-pressure tanks. Loading was accomplished in about 42 hours.

The shipment was consigned to The Chemstrand Corp. at Pensacola, Fla. Entering the Mississippi River above Baton Rouge, the barge traveled along the Intercoastal Waterway from New Orleans to Pensacola.

Barge shipment of ammonia from the El Dorado plant is to continue although no exact schedule has been established.

#### Stauffer Files Patent Infringement Suit

Stauffer Chemical has filed suit against Chemical Insecticide Corp., for alleged infringement of Stauffer's Vapam soil fumigant patent.

The complaint was filed in the Federal District Court for New Jersey, and asks for an injunction against further manufacture and sale of Chemical Insecticide's "Chem-Vape" soil fumigant, as well as treble damages for willful infringement.

Stauffer's patent, U. S. No. 2,766,-554, covers the use of sodium methyl dithiocarbamate for soil fumigation purposes.

#### Independent Pest Control Operators Organize (SanCoa)

A group of 18 independent pest control operators has formed Sanitary Consultant Associates (SanCoa) to promote the theme that "sanitation and pest control go hand in hand." Founders of SanCoa believe their organization can service a number of units of hotel and restaurant chains in the fields of pest control and sanitation. They anticipate that they will be able to contract with such industries

at top levels rather than with individual managers as is now the custom.

SanCoa is not a trade association, since a prerequisite is membership in the National Pest Control Association. Training programs are to be inaugurated.

SanCoa Associates are: C. L. Hockenyos, Sentinel Insect Control Laboratory, Springfield, Ill.; E. J. O'Donnell, I&R Exterminating Service, Quincy, Ill.; C. W. Ferguson, Sentinel Pest Control, Decatur, Ill.; Norman Dodd and S. A. Nielsen, Rose Exterminator Co., Chicago; W. K. Delaplane, Jr., Illinois Pest Control & Service, Champaign; C. O. Partlow, Reliable Exterminating Co., Lafayette, Ind.; R. O. Williams, Aord-Vark Pest Control, Evansville, Ind.; K. H. Draper, Draper Exterminating Co., Indianapolis; Harvey Sturgeon, Sturgeon Pest Control Co., Louisville; Harlan Schuyler, Termite Exterminating Co., Kansas City; R. E. Schendel, Schendel Pest Control, Topeka; H. B. Ives, Rose Exterminator Co., Detroit, Mich.; I. B. Carncross, Syracuse Chemical Co., Syracuse, N. Y.; H. K. Steckel, Tornado Mfg. Co., Columbus, Ohio; B. J. Berger, Abel Pest Control Co., Springfield, Ohio; R. C. Yaeger, Rose Exterminator Co., Cincinnati, Ohio; J. J. Mooney, Columbus Pest Control, Columbus, Ohio; and H. H. Klein, Klein Exterminating Co., Milwaukee, Wis.

Dr. Steckel is chairman of the board. Also on the board are: Messrs. Hockenyos, Berger, Yaeger, and Mooney. Executive secretary is Eugene L. Davidson, Reisch Bldg., Springfield, Ill.

#### Rohm & Haas Gets Injunction in Dithane Patent Infringement

A Federal District Court in West Virginia has enjoined Roberts Chemicals, Inc., from continued infringement of the patent under which Rohm & Haas sells its Dithane brand fungicide. The order enjoins Roberts from making, using, or selling any fungicide composition having as an active ingredient nabam, zineb, or any other salt of an alkylene bisdithiocarbamic acid.

#### USDA Approves ET-57 for Control of Cattle Grubs

Dow Chemical's ET-57, a systemic insecticide for control of cattle grubs, has been given approval by USDA for limited use in certain areas of several midwestern states. FDA concurred in the action.

Chemically, ET-57 is O,O-dimethyl-O-2,4,5-trichlorophenyl phosphorothiate. It is to be available in certain areas of Iowa, Nebraska, South Dakota, and Wyoming under the trade names of several companies, although it is manufactured by Dow.

Short supply of the chemical is the reason for its limited availability. Concentrating the short supplies into certain regions will make it possible to study the chemical's impact on those regions, it is hoped.

Cattle grubs, the larvae of heel flies, cause annual losses often exceeding \$100 million in damaged meat and perforated hides. ET-57, administered as a pill or as a liquid, circulates with the body fluids of treated animals and destroys the grubs that have burrowed into the flesh. It has shown \$5 to 100% control. Residues of the insecticide are not detectable in the flesh of treated animals after 60 days.

USDA has advised cattlemen not to slaughter animals until 60 days after treatment and not to treat lactating cows in order to avoid residues in milk. It says treatments, in all except the southern states, should be made from September through December.

#### TVA Produced 266,000 Tons Of Fertilizer in Fiscal '57

TVA reports it produced 266,000 tons of fertilizer in the 1957 fiscal year -a little more than 1% of the fertilizer consumed in the U.S. during 1955-56. TVA-produced fertilizer was used by some 3000 test-demonstration farmers for experimental application, or was sold to farmer cooperatives and fertilizer dealers for use in educational programs. The fertilizers TVA produced were sold with the stipulation that they be used in ways that will conserve and keep soils productive, and were made available to farmers only in areas where use of the materials is agriculturally and economically feasible, and where agricultural colleges have helped define a program for their use, TVA said,

TVA said it spent a net of \$2,642,-656 on fertilizer and munitions development work in 1957, compared with \$1,127,746 during the 1956 fiscal year.

#### EDUCATION

#### Plant Pathology, Entomology In One Department at U. of Mass.

A new department of entomology and plant pathology is to be established at the University of Massachusetts college of agriculture. The new department is expected to bring similar functions together with a goal of improved operations, programs, and