# New Products and Equipment...

#### Base for Granular Pesticides

R. T. Vanderbilt announces availability of Pyrax pyrophyllite in granular form to manufacturers of granular herbicides and insecticides. Initial production, at Robbins, N. C., will include 8–20, 10–30, and 30–60 mesh sizes. Mixed carload shipments are offered.

According to the company, its low absorption allows release of the toxicant without losses due to irreversible binding with the base. The granules are neutral in pH. They are also said to be nonhygroscopic, thus preventing any tendency toward products becoming sticky during storage or after application.

## Metering Pump for Fertilizer Distribution

Designed specifically for applying liquid fertilizer solutions by subsurface injection or surface spraying is a solutions metering pump developed by Dempster Mill Mfg. Co. The pump is claimed to be capable of accurate delivery within a range from 6 to 75 gallons per acre, on a swath from 80 to 280 in.

# Package Plant for Liquid Fertilizer

Butler Mfg. Co. offers package-unit liquid fertilizer mixing plants, includ-

ing mixing equipment, aqua conversion system, and storage facilities. Butler will also design and build the building to house the plant and office. The plants may be obtained on a turnkey basis or as ready-to-install units.

The plant's capacity is 10 to 15 tons per hour, depending on the fertilizer grade. This includes production of straight aqua ammonia, custom formulations, and standard fertilizer grades. Liquid raw materials are delivered to the mixing tank through a system of meters and flow regulators said to be accurate to within 0.1%. Urea and potash are dissolved in the mixing tank mechanically.

Aqua ammonia is converted from anhydrous directly from tank car and may then be sold for direct application.

Storage facilities available are: aluminum tanks for nitrogen solutions; black iron tanks with plastic lining for phosphoric; and black iron tanks for storage of neutral grades.

PE3

# Test for HCN Concentration at Locations Being Fumigated

A test kit for determining the amount of hydrogen cyanide gas present in any location under fumigation is offered by Compact Air Samplers. The method is suitable for concentrations ranging from 5 to 5000 p.p.m.

The kit is packaged in a box so that it is portable. Reagents are supplied

in sealed ampules and small vials, so that the only requirement for making a determination is distilled water. Sufficient reagents are included for 100 determinations, each of which takes between 1 and 3 min.

The test method is based on a color reaction, and the color of the test solution is compared with a set of glass standards set in a rotating disk which is viewed through a pocket-size comparator.

PE5

## Industrial Glove Announced

An industrial glove made of nonabsorbing butyl rubber compound and designed to protect the hands from acids has been introduced by Hood Rubber Co.

The glove is a one-fingered model with seam and crotch reinforced. It is light green in color and has a rough, stippled finish. It is said to resist sulfuric, nitric, and phosphoric acids, oxygen, ozone, oils and salts.

PE6

#### Moisture Determination

Rapid determination of moisture in a wide range of chemicals (both solid and liquid), foods, drugs, and industrial products, is possible with the redesigned Aquatrator, offered by Precision Scientific Co. Utilizing Karl Fischer reagent, which is sufficiently sensitive to allow moisture determinations as low as 0.005% and as high as 100% to be determined quantitatively, the electronic indicator is said to show the end point of titration as readily in dark solutions as in light-colored materials and is unaffected by normal variations in line voltage. This instrument performs in 5 to 15 minutes moisture determinations which by oven-drying or distillation methods require from 1 to 24 hours.

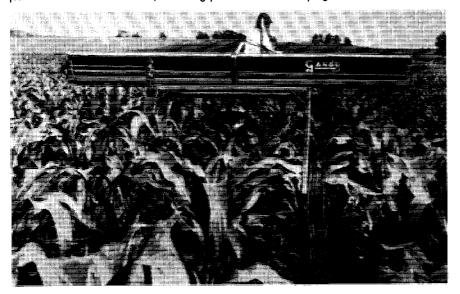
# Polyethylene for Trench Silo Cover

The Shellmar-Betner Division of Continental Can is manufacturing both clear and black Shellene polyethylene film, in widths up to 84 in., for use as silo covers.

The polyethylene cover is rolled crosswise across the feed, with adjacent strips lapped 6 to 9 in. shinglewise to allow for water run-off. The farmer can remove and save the film, sheet by sheet, as the ensilage is required for feeding stock.

## Granular Insecticide Applicator for Corn

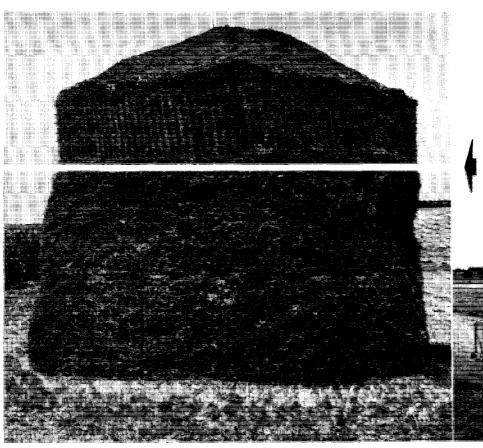
Granular insecticide applicator offered by E. S. Gandrud Co., Inc., applies metered quantitities of granules in 12- to 14-in. ribbons over each of four rows. Height adjusts between 2.5 and 5 ft., allowing plants to remain upright.



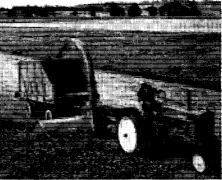


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Tallahassee, Florida



In experimental farm studies conducted in Washington State, the yield of alfalfa was increased nearly 40% by adding Moly to molybdenum-deficient soil. The fodder below the white line in the stack at the left indicates yield an maly-deficient soil. Valume above the line indicates increase produced by addition of Moly to soil. Photos courtesy of John Deers, Moline, Illinois.



# How alfalfa yield has been stepped up nearly 40% by adding MOLYBDENUM to some acid Washington soils

# Application of Sodium Molybdate to Moly-deficient soil, tests show, will result in sizeable yield increases

Scientific tests conducted by Dr. H. M. Reisenauer in Spokane County, Washington, have resulted in greatly increased yields of alfalfa. Investigations that began in 1952 have shown that poor forage yields were caused by Moly deficiency. Correction was made by adding one pound of sodium molybdate per acre. The applications were made in water solution, using a weed spraying outfit.

#### Other marked advantages result from the use of Moly

When alfalfa is grown in a Moly-deficient soil the plants tend to be stunted and pale green in color. Spots develop between the leaf veins, often spreading to affect the entire leaf. Such leaves finally die and fall off. When other conditions are favorable, these deficiency symptoms are corrected by the addition of available Moly to the soil, resulting in greater yields and more vigorous growth.

#### Tests here and abroad show that all crops need Moly

Thorough tests, made over the last 15 years, both in this

country and in many foreign areas, have shown conclusively that all crops need Moly in a form which can be assimilated readily by the plant. If available Moly is not present in the soil in sufficient quantities, then it should be added either alone or combined with fertilizers.

# Help offered for spotting and correcting Moly-deficiency

Specific experiments with dozens of different crops, ranging from citrus to sugar beets, proved that Moly deficiency exists in soils in many areas in the United States. In order to help you diagnose Moly Soil deficiencies in your territory, we will be glad to send you test samples of Sodium Molybdate. Write for MOLY TEST SAMPLES. Address Climax Molybdenum Company, Department 44, 500 Fifth Avenue, New York 36, N. Y.

#### MOLY CAN BE ADDED TO ANY FERTILIZER BLEND

In recommending fertilizer blends you can always specify that certain quantities of Sodium Molybdate be included as an additive.

# CLIMAX MOLYBDENUM

Shellmar-Betner's polyethylene film is flexible over a temperature range from  $-70^{\circ}$  F. to  $170^{\circ}$  F. No plasticizers or extenders are used in its manufacture, hence embrittlement or aging problems are not present, the company claims.

When the silo is located out in the open, and complete screening of the sun's rays is not possible, black polyethylene, which is impervious to ultraviolet light, is recommended. When enough matter can be spread over the film to screen out sunlight, uncolored or clear polyethylene has been found satisfactory.

# Liquid Formulation of Seed Disinfectants

Du Pont announces availability of liquid formulations of its Ceresan seed disinfectants. The new formulations retain both the fumigating and residual action of the dry mercury compounds and offer the convenience of liquid form and the safety factor of a dye to color the treated seed. They are recommended for use on wheat, rye, barley, oats, flax, and cotton.

## Antibiotic for Cheese Processing

Baird Chemical announces it has been named exclusive sales agent in this country for Nisin antibiotic, which is used in Europe in the manufacture of cheese to inhibit growth of clostridia. The preparation, to be sold by Barrett, is called Nisaplin and is made in England by Aplin & Barret, Ltd. Baird expects to offer it in powder form to canners and other food processors in the near future.

# Barn Fogger Fights Insects

Equipment that spreads a "fog" of insecticide through a barn, saturating the cattle and the building and keeps flies out of the barn and off the cattle even in the fields is announced by the Electric Sprayit Division of Thomas Industries. One type consists of a half-gallon plastic bottle with a four-spray brass nozzle, capable of a 40-foot carry in all directions with 30 to 40 lb. of pressure.

# Storage Tanks for Phosphoric Acid

Butler Mfg. Co. has introduced vertical storage tanks to be used by fertilizer and feed manufacturers for storing nonpressure corrosive liquid such as phosphoric and sulfuric acid. The tanks, with plastic linings, are said to be more economical than stainless steel

and rubber-lined tanks. The tanks are available in 8600- and 12,000-gallon sizes, as well as other capacities to suit specific needs.

PE12

# Multiwall Bags with Reinforced Ends

A multiwall paper shipping sack with reinforced top and bottom is announced by Bemis Bro. Bag Co. Reinforcement consists of strips of Kraft paper between plies at the bag's top and bottom.

# Organophosphate Fly-Killer

Dow announces patenting of an organic phosphate compound for use as a fly-killer insecticide. Called ET-14, the chemical is being produced only in small quantities for research and testing purposes. Said to be low in toxicity to warm-blooded compounds, it has shown effectiveness against house flies, vinegar or "fruit" flies, and some other insects.

## Squeeze Duster Pack for Garden Chemicals

A squeeze duster package is being used by Du Pont to package its garden insecticide-fungicide dusts, the company has announced. The flexible package, eight-ounce size, is a cylinder of polyethylene resin with a directional nozzle. The package can be refilled, the company states.

Chemicals to be available in the package are: a rose insecticide and

fungicide formulation (containing methoxychlor, lindane, a miticide, sulfur, and ferbam); floral dust (containing methoxychlor, ferbam, sulfur, and rotenone); vegetable garden dust (containing methoxychlor, zineb, and rotenone); and tomato dust (containing methoxychlor and a fixed copper fungicide).

## Safety Instruments Measure Flammables

Mine Safety Appliances Co. has introduced a line of portable instruments to meet industrial needs for detecting and measuring flammable gases and vapors. The instruments are calibrated at the factory for the particular vapors for which they will be used.

PE16

#### Spray Rig on Truck

H. S. Watson Co. announces availability of a pick-up truck spray rig for pesticide applications. The rig is suggested particularly for alfalfa aphid control.

According to Watson, the sprayer can spray an acre in 1.2 to 2 min., laying a 52-ft. swath. Two hundred gallons of spray can be carried on the truck. Equipment is controlled from the inside of the truck cab, thus ensuring safety for the applicator.

The pump can be quickly mounted or demounted from the power take-off shaft coming out of the rear end of the truck just under the body.

PE17



#### READERS' INFORMATION SERVICE

ACS editors screen all manufacturers' product announcements and industrial literature, publishing only what is *really* new and containing valuable scientific or technical data.



Circle desired items and Ag and Food will do the rest

YOUR RIS COUPON APPEARS ON NEXT PAGE

