

# New Products and Equipment . . .

## Ceramic Nozzles, Fiberglass Tanks on Boom Sprayers

Ceramic nozzles and fiberglass tanks will soon be available on agricultural chemical sprayers made by Hanson Equipment Co.

The ceramic nozzles promise at least three times the operating life now achieved with metal nozzles, the company says. Spray patterns can be maintained much longer because the ceramic orifice is harder than metal orifices now in use—corrosion and abrasion are retarded in the ceramic, and thus do not distort the spray pattern originally designed for the nozzle. Capacities of 2.5 and 5 gal./acre will be available at first, with larger sizes to follow. The ceramic nozzles are interchangeable with metal types, and the prices of sprayers with the new nozzles will be about the same as those for ordinary sprayers.

Fiberglass tanks will be optional on 1958 models. Tanks of 200-gal. capacity will be available first. In addition to better corrosion-resistance, the fiberglass tanks offer lighter weight (one third that of steel and two-thirds that of aluminum) and translucent walls (permitting easy checking of liquid level). Cost will be about the same as for aluminum-tank sprayers.

Further information is available from Dept. A&F, Hanson Equipment Co., Beloit, Wis.

## Calculator for Fertilizer Trade

A new type of calculator has been designed by the phosphates and nitrogen division of American Cyanamid as an aid in determining quantities of phosphatic materials to be added when formulating various grades of mixed fertilizers.

The calculator is being distributed by the division's field personnel, and also can be obtained by fertilizer manufacturers on request to Dept. A&F, Phosphates Department, American Cyanamid Co., New York 20, N. Y.

## Wood Sugar Derivative Improves Weed Killer

Small amounts of Maracarb X-1, a product of Marathon Corp., will stabilize 2,4-D amine concentrates and prevent insolubilization and crystallization of the amine from aqueous solutions, according to the manufacturer. The weed killer remains at full strength in diluted formulations, and will not plug spray nozzles or other-

wise interfere with application from spray equipment when so stabilized, it is said.

Maracarb X-1 is a complex mixture of the salts of lower molecular weight lignosulfonic acids and the salts of alkaline reversion products of hexoses and pentoses. It is obtained by fractionation of spent sulfite pulping liquors in Marathon's process for the manufacture of purified wood chemicals. Additional technical information on Maracarb X-1 and related chemicals is available from Dept. A&F, Marathon Corp., Rothschild, Wis.

## Boomless Sprayer Works with Cross Winds

A boomless field, pasture, and row-crop sprayer that takes advantage of cross winds to permit spraying up to a 40-ft. swath has been introduced by Hanson Equipment. The automatic wind-compensated feature is marketed as the Swath-O-Matic.

Cross winds that stop ordinary sprayers are made to aid the new sprayer by an automatic valve. As the sprayer goes down field, the nozzle facing the wind is shut off. The open nozzle sprays with the wind. When the sprayer reaches the end of its run, a simple flip of the control valve handle turns the spray off. After turning to return up field, the operator flips the control valve handle to turn the sprayer on again. But the automatic valve directs the spray to the other nozzle so that automatically the wind again aids spraying. When winds are blowing in the same direction as the sprayer travels, all nozzles can be opened to get a swath up to 68 ft. wide.

For more information, write Dept. A&F, Hanson Equipment Co., Beloit, Wis.

## Bulb Protector and Herbicide

Two new products are being produced by the Nott Mfg. Co. One is Chick-Not, a chickweed herbicide; the other is Bulb-Saver, a combination of fungicide, insecticide, and repellent.

Chick-Not is said to be effective in temperatures as low as 40° F., whereas other herbicides are generally ineffective below 65°.

Chick-Not is a special combination of the herbicide chemicals potassium cyanate and sodium arsenite, plus an unrevealed additive that is said to triple its effectiveness. Packaged in concentrated form, Chick-Not is mixed with water, sprayed on grass, and takes its effect within three to five

days. It is nonvolatile, presents no fire hazard, and will not stain clothes.

Bulb-Saver is said to protect bulbs and corms from fungus diseases and the ravages of moles, gophers, rats, and mice. It is packaged in a shaker-top canister. Only a light dusting is required at planting time.

Further data are available from: Dept. A&F, Nott Mfg. Co., Mount Vernon, N. Y.

## Isocinchomeric Acid

Isocinchomeric acid is offered by Ansul Chemical on a commercial basis. It is suggested as an intermediate in the preparation of insecticides.

Ansul's isocinchomeric acid is a light tan to yellow powder with a molecular weight of 167.12. It has a melting point of approximately 236° C. (decomposes) and a neutralization equivalent of 83.56 (pure material). Tentative specifications set its purity at 95%. It has no free water, less than 1% isocinchomeric acid monohydrate, and its nonacidic impurities are less than 5%.

More information and small samples may be obtained by writing to Dept. A&F, Market Research and Development, Ansul Chemical Co., Marinette Wisconsin.

## Synthetic Garments Protect Against Corrosive Fumes, Liquids

Dynel and Orlon garments for protection of fertilizer and chemical workers exposed to corrosive fumes and dusts and acids are manufactured by Milburn Co.

Sold under the trade-name Ply Garb, the synthetic garments are reported to give up to 10 times the service of ordinary cotton clothing in corrosive environments.

The synthetic garments are washable, nonshrinking, and nonabsorbent. They may be easily decontaminated. Possessing exceptional abrasion resistance, they may be subjected to repeated laundering without showing wear. They are immune to mold, fungus, and insect attack.

Ply Garb safety and protective clothing is tailored in cover-alls, shop coats, or two-piece uniforms, in natural or gray colors.

They are available in a highly tear-resistant gabardine weave or a lightweight herringbone weave.

Further information is available from Dept. A&F, Milburn Co., 3246 E. Woodbridge, Detroit 7, Mich.