

New Products and Equipment . . .

Electrodusting

Agricola, Ltd. has introduced a new principle of applying agricultural chemical dusts to plants. Involved is the positive electrostatic charging of dust particles to enhance their power to adhere to negatively charged plant surfaces. The dust particles are charged in an ionized field within the dusting machine, called an electro-duster.

The advantages of this method, cited by Agricola, are: even and uniform distribution of dust particles on all sides of plant surfaces, greatly increased dust deposits, almost complete freedom from reliance on meteorological conditions, and enhanced adhesive properties of dusts.

In addition to the electro-duster, Agricola has also developed special dusts, called electro-dusts, for use with the applicator. Other dusts can be used with the duster, the company says, but full benefits of the principle can be obtained with the special dusts.

The company is also working on a method of electro-spraying. Final details are yet to be completed, but Agricola says the principle definitely works.

Further details are available from Dept. A&F, Agricola, Ltd., Gresham House, 24 Old Broad St., London E.C.2, England.

Portable Cold-Storage Room

Lightweight portable cold-room is now available in Britain and for export. Constructed of 7 ft. by 7 ft. aluminum 100% insulated sections, each weighing 85 lb., the freezer is assembled by turning screws into designated holes and slots.

Fitted outside is a hermetically sealed fractional horsepower compressor unit, using less than 1 unit of electricity per hour, preset to maintain required low temperature to suit whatever product is stored. Models for zero and subzero temperatures are available, and humidity control and defrosting may also be added if required.

For further information, write Dept. A&F, MESSRS. PENFOLD & PARTNERS, 120/122 Victoria St., London S.W. 1, England.

Apple Fungicide

Development of a precover fungicide to control major apple diseases in the fruit-growing industry has been announced by the Corona Chemical

Division of the Pittsburgh Plate Glass Co.

The product, known as Phybam-S, has been field tested by many state experiment stations. It has been effective in controlling apple diseases such as cedar rusts, scab, and powdery mildew. The fungicide is micronized to minute particle size, providing better coverage and cutting spray costs by 50%, the company reports.

More details may be obtained from Dept. A&F, PITTSBURGH PLATE GLASS Co., 632 Fort Duquesne Blvd., Pittsburgh 22, Pa.

Methyl Parathion

Velsicol Chemical announces that it will have technical methyl parathion available for the coming growing season. Methyl parathion can be used to control boll weevils in areas where resistance has developed to BHC and other chlorinated hydrocarbon insecticides. It is also effective in controlling mites and aphids on cotton and other crops.

Further data available from Dept. A&F, VELSICOL CHEMICAL CORP., 330 E. Grand Ave., Chicago 11, Ill.

Oxygen Indicator

Baker & Co. has developed an indicator which can measure as little as 2 p.p.m. of oxygen in hydrogen or inert gases despite the presence of up to 3% carbon monoxide. It can be used in ammonia plants, where oxygen can poison the catalysts.

In the company's indicators, the gas being tested passes continuously over a catalyst which causes any oxygen present to combine with hydrogen. The increase in temperature caused by this reaction is measured by a sensitive thermopile.

The gas being tested is measured continuously by a rotameter and passed through a coil in a liquid bath to stabilize its temperature. If it does not contain enough hydrogen for test purposes, a small amount is generated by an electrolytic cell built into the indicator, and automatically mixed in.

Ask for more details from Dept. A&F, BAKER & Co., INC., INSTRUMENT DIVISION, 205 Grant Ave., East Newark, N. J.

Weedkiller

Monoxone, introduced by Plant Protection Ltd., is being used effectively against cleavers and other hormone-resistant weeds in cereals. It

can be applied through a low-volume sprayer, and can be handled safely without any special precautions. The chemical nature of Monoxone was not revealed.

Complete details are obtainable from Dept. A&F, PLANT PROTECTION LTD., Bolton House, 61 Curzon St., London W. 1, England.

Chromatographic Refractometer

Instrument cuts analysis time up to 75% and can be operated by inexperienced personnel. Analysis can be made automatically, and a permanent record of the results can be examined immediately or filed for future use. When off-scale readings are encountered, a single dial adjustment is all that is required. Instrument is the null type, and is designed for continuous operation on 115-v., 60-cycle, a.c. lines. No batteries are required.

For complete details, write Dept. A&F, PHOENIX PRECISION INSTRUMENT Co., 3803-05 N. 5th St., Phila. 40, Pa.

Lactic Acid Starter Culture

Merck & Co. now supplies a dry lactic acid starter culture for use in production of dry sausage. Originally developed by scientists of the American Meat Institute Foundation, the culture, known as Accel, is a formulation of the microorganism, *Pediococcus cerevistae*. This organism converts dextrose to lactic acid, the substance primarily responsible for the characteristic tangy flavor in fermented sausage.

Use of Accel for summer sausage, Lebanon bologna, Thuringer, cervelat, salami, and pork roll has approval of the Meat Inspection Branch, USDA.

Write Dept. A&F, MERCK & Co., INC., Chemical Division, Rahway, N. J.

Methallyl Chloride

Now commercially available, methallyl chloride (3-chloro-2-methyl-1-propene) may be found of interest for synthesis of insecticides, fungicides, and fumigants. The presence of two highly reactive centers in the methallyl chloride molecule suggests many uses for the compound as an intermediate in organic synthesis.

For a review of methallyl chloride chemistry and a bibliography, write Dept. A&F, FMC Organic Chemicals Division, FOOD MACHINERY & CHEMICAL CORP., 161 E. 42nd St., New York 17, N. Y.