

New Products and Equipment . . .

Ammoniator-Granulator

A continuous combination ammoniator and granulator is available from Edw. Renneburg & Sons Co. It is said to be able to handle all grades and analyses of fertilizer. The unit, a cylindrical shell 7 ft. in diameter and 14 ft. long, is designed to permit use of anhydrous ammonia, nitrogen solutions, sulfuric acid, phosphoric acid, steam, hot or cold water, and compressed and fresh air. Degree of ammonia absorption by the dry material is said to be higher than in other methods used in making granular fertilizer. This, along with the effectiveness of the fume exhaust system, is said to leave no appreciable trace of ammonia odor in the atmosphere around the unit. **PE1**

Cattle Rubber Dispenses Insecticide

A cattle rubber device that dispenses insecticide is offered by Yuille Farm Chemical Co. to help control external parasites of cattle, such as lice and horn flies. A one-gallon storage tank with a needle valve control is filled with the insecticides and filters out to the rubber device as cows use the rubber. According to

Yuille, three to four gallons of insecticide will service one applicator for 12 months and effectively treat 60 head of livestock during this time. **PE2**

3-Million-Volt Van de Graaff

A 3-million-volt Van de Graaff particle accelerator, said to be the most powerful and versatile machine radiation source now commercially available, has been announced by High Voltage Engineering Corp.

The 9-ton supervoltage generator is designed to produce nearly all the fundamental radiations—electrons, x-rays, positive ions, or neutrons. Conversion of the machine from production of one type of radiation to another is achieved through use of appropriate components manufactured by High Voltage. For example, the accelerator can be shifted from electron processing to x-ray production by replacing the beam scanner of the machine with a special heavy metal target 1 inch in diameter and $\frac{1}{8}$ inch thick.

The unit is designed for either vertical or horizontal mounting, increasing its utility in processing, radiographic, medical, and research programs. The Van de Graaff has been used extensively in research and in the past several years has become use-

ful in chemical processing, sterilization, and radiography.

Numerous organizations report effective use of the Van de Graaff in such work as food preservation; cross-linking of plastics to extend their use in packaging, and for initiation of chemical reactions—polymerization, halogenation, oxidation, and others.

The new machine has a power output rating of 3000 watts of radiation at 3-million volts. Company claims this unit will produce a radiation field several hundred times more intense than the most powerful radioactive **PE4**

Growth Promotant from Fermentation

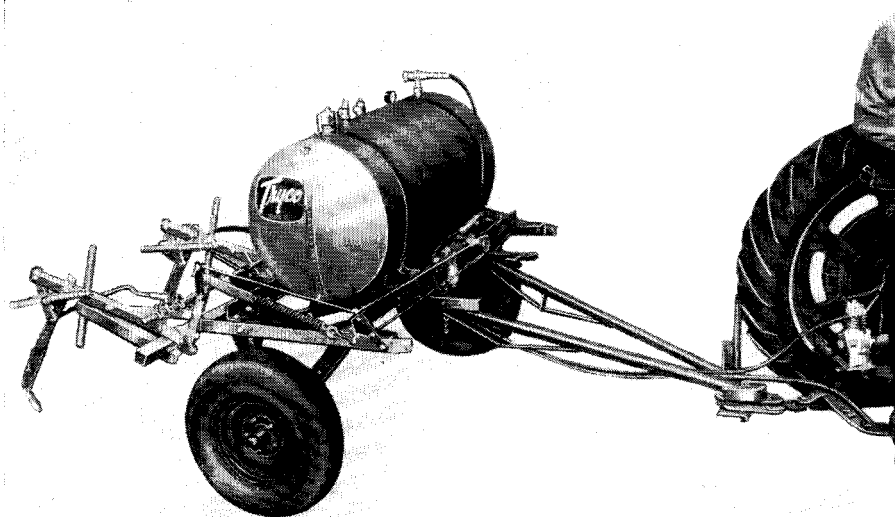
Condensed Neoferm, a fermentation product containing unidentified growth factors, is offered by Dawe's Laboratories, Inc., for use in animal feeds. Condensed Neoferm is a blended product containing Neovite, a primary fermentation product developed by the company, dispersed in other fermentation solubles.

According to the company, Neovite was found in feeding trials to be an effective growth promotant capable of stimulating additional growth over and above that normally expected from the usual sources of unidentified factors. Feeding trials indicated also that condensed Neovite broth was more potent than the dried material and that, when the broth was added to a ration along with condensed grain and molasses fermentation solubles, the results were superior to the simple addition of responses to the individual ingredients.

The company says that because Condensed Neoferm is a liquid solubles type product (standardized at 60% solids), it improves palatability and appearance and eliminates dustiness. **PE5**

Lightweight Applicator for Nitrogen Solutions

A lightweight nitrogen solutions applicator that can also be adapted to spraying pesticides is offered by Tryco Mfg. Co. All parts which contact the liquid are made of either aluminum or stainless steel and the nitrogen solutions are forced through a stainless steel orifice by a compressor driven by power take-off. The knifing tool bar can be purchased as a kit for addition to trailers already in the field. A standard boom kit for pesticide application is available for mounting on the front of the trailer **PE3**



Thimet May Be Marketed for Cotton This Year

American Cyanamid's Thimet, a systemic insecticide that can be applied to seeds, will probably be marketed on a limited basis to cotton seed dealers in Texas and Mississippi this year. Originally called compound 3911, Thimet's chemical name is *O,O*-diethyl *S*-Cethylthiomethyl phosphorodithioate.

In tests by State and Federal agricultural research scientists, Thimet stays in the plants and continues to