Light Microscopic Images Enhanced by Use of HMCS

The Hoffman Modulation Contrast System (HMCS), an image enhancement system for the light microscope, is available either as new standard equipment or for upgrading compound microscopes. The three components of



HMCS are: 1) the modulator, a special amplitude filter placed in the back focal plane of the objective; 2) a slit, partially covered by a polarizer, located at the

front focal plane of the condenser; and 3) a contrast control polarizer located before the slit. By removing the slit from the optical path, the objective can be used for bright field. HMCS is described in an eight-page booklet that includes photomicrographs showing the three-dimensional, high-contrast, high-resolution images possible with microscopes equipped with the system.

Contact: Modulation Optics Inc., 100 Forest Drive, Greenvale, NY 11548; (516)484-8882.

Ridomil 2E Labeled for Use on Peppers and Eggplant

The Environmental Protection Agency has labeled Ridomil 2E fungicide for soil application to control *Phytophthora* and *Pythium* diseases in peppers and eggplant. Three applications provide optimal control, the first (2 qt per acre) at the time of planting and the second and third (1 qt per acre) at 30-day intervals.

Contact: Jim Palmer, Ciba-Geigy Corporation, P.O. Box 18300, Greensboro, NC 27419; (919)292-7100.

TopGun Weed Killer Nontoxic to People, Pets, and Wildlife

TopGun is a broad-spectrum herbicide that kills weeds on contact but does not leave harmful residues in the soil and is not toxic to people, pets, and wildlife. The active ingredient is a blend of naturally occurring fatty acids that disrupts cell membranes of plants, causing them to shrivel and die. The fatty acids biodegrade, and seedbeds or grass

can be replanted within 48 hours after spray application. As with most herbicides, TopGun is most effective against young, actively growing annual weeds and is available in 16-, 32-, and 64-oz concentrate and 24- and 64-oz ready-to-use sprayers.

Contact: Safer, Inc., 60 William Street, Wellesley, MA 02181; (800)423-7544.



Immunoassay Kits Detect Fungal Plant Pathogens

New research immunoassay kits use the principles of enzyme-linked immunoassay to identify and quantify fungal pathogens in plant samples. The kits, designed for laboratory use, contain all the necessary reagents, test wells, and instructions and require only a micropipette, plate shaker, and plate reader.



The kits, which can be used alone or in combination with microbiological and pathological procedures, provide positive identification of a specific pathogen, even in the presence of contaminating organisms or in a deteriorated sample, and allow detection of pathogens before symptoms appear. Currently available are kits for detection of Pythium, Phytophthora, Rhizoctonia, and Sclerotinia; kits for detecting other pathogens are being developed.

Contact: Steve Banegas, Agri-Diagnostics Associates, 2611 Branch Pike, Cinnaminson, NJ 08077; (609)829-0110.

PolySil Blotting Membranes Nonflammable and Nylon-free

Electrophoresis blotting membranes of PolySil are strong (four times thicker than standard nitrocellulose sheets) and nonflammable, do not curl in solvents, and do not contain nylon, thus avoiding destaining problems. Resolution equals that obtained with nitrocellulose. The membranes, which can also be used for dot blot analysis, utilize MPS microporous plastic sheets from Amerace Corporation. The membranes are available in three sizes—15 × 15, 20 × 20, and 26 × 26 cm—and come in packages of five or 10 sheets.

Contact: Polysciences, Inc., Dept. PSL, 400 Valley Road, Warrington, PA 18976-2590; (800)523-2575.

Latent Heat Converter Greenhouse Dehumidifier

The LHC (latent heat converter) greenhouse dehumidifier combines three features most desired by greenhouse growers: dehumidification, conversion of moisture into supplemental heat, and



sterilization of airflow. The LHC is based on a hygroscopic, sterilizing, salt-based brine solution. Moisture condenses in the LHC and latent heat is transferred to the circulated air, increasing air temperature and saving up to 40% of the energy wasted by ventilation methods. The sterilizing effect of the brine solution on the air significantly reduces the need for spraying and powdering. One unit dehumidifies 10,000-20,000 sq ft, depending on the crop.

Contact: Avi Ben Har, Ormat Turbines Ltd., P.O. Box 68, Yavne 70650, Israel; 8-439901.

Banner Approved for Use on Cool-Season Grasses

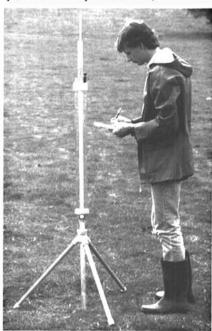
The Environmental Protection Agency has granted label approval to Banner for use on cool-season grasses. The systemic fungicide is effective against dollar spot, brown patch, anthracnose, rust, red thread, powdery mildew, stripe smut, Helminthosporium spp. (leaf spot and

melting out), and Fusarium blight. Banner is a concentrated liquid that mixes easily and quickly and is effective at low rates of 1-2 oz per 1,000 sq ft.

Contact: Michael Joyce, Ciba-Geigy Corporation, P.O. Box 18300, Greensboro, NC 27419; (919)292-7100.

Guelph Permeameter Measures Qualities of Range of Soils

The EL514-500 Guelph permeameter provides a simple, quick method for determining the permeability and absorption qualities of soil, including hydraulic conductivity and matric flux potential. The permeameter, which can



measure soils ranging from coarse sand to heavy clay, comes as a kit complete with everything needed to auger a hole, prepare the well, and make a reading. A measurement requires less than 2.5 L of water and, in most soils, takes less than 3 hours.

Contact: Nick Allen, ELE International Limited, Eastman Way, Hemel Hempstead, Hertfordshire HP2 7HB, England; (0442)218355.

No endorsement of the products or services described or of the statements or claims made in these listings is assumed by PLANT DISEASE or by The American Phytopathological Society.

New Boehringer Mannheim Biochemicals Catalog Available

The 1987/1988 edition of the Boehringer Mannheim Biochemicals general catalog lists over 1,800 products for molecular biology, immunology, cell biology, and biochemistry plus over 300 new products. Each product is described in detail, including analysis data, storage information, and possible applications. Other

features include an expanded table of contents, alphabetical product listings, quick-reference tabs, and extensive cross-referencing of related products. Copies of the catalog are free.

Contact: Kristen Kinkade, Boehringer Mannheim Biochemicals, P.O. Box 50816, Indianapolis, IN 46250; (800)428-5433.

