

Genome activation in tobacco streak virus and in alfalfa mosaic virus may depend on zinc, report P. C. Sehnke and associates at Purdue University, West Lafayette, Indiana. The "zinc-finger" type of binding may play a role in tobacco streak, and a similar sequence is involved in alfalfa mosaic. (Virology 168:48-56, 1989)

Rhizobacteria from sugar beets that were applied to sugar beet seeds suppressed Heterodera schachtii in roots of young plants in the field, report M. Oostendorp and R. A. Sikora of the University of Bonn, West Germany. The effect was attributed to bacterial alteration of root exudates that affected nematode hatch, attraction, and penetration. (Rev. Nematol. 12:77-83, 1989)

Nickel nitrate at  $10^{-2}$  M effectively controlled bacterial blight of rice when sprayed on plants in the boot stage, report A. Chandrasekaran and P. Vidhyasekaran of the Tamil Nadu Rice Research Institute in Aduthurai, India. (Int. Rice Res. News 1. 13[6]:36, 1988)

The terpenoids citral and eugenol at 300 ppm inhibited Aspergillus flavus in stored beans (Phaseolus radiatus) without being phytotoxic, report A. Asthana, K. Dixit, and N. Kishore of Gorakhpur University in India. (Arch. Phytopathol. Pflanzenschutz 24:417-421, 1988)

Two populations of Crinipellis perniciosa causing witches'-broom of cocoa have been identified by B. E. J. Wheeler and R. Mepsted of Imperial College, Ascot, England. The population from Bolivia, Ecuador, and Colombia induces severe symptoms, but the one from Brazil, Trinidad, and Venezuela does not. (Plant Pathol. 37:475-488, 1988)

Of 32 samples of animal feed, 27 contained Aspergillus flavus, and 21 isolates were aflatoxicogenic, report M. A. Moreno and associates of the University Complutense, Madrid, Spain. (Mycopathologia 104:149-151, 1988)

The potato rot nematode was reported for the first time in seeds and hulls of peanut by D. deWaele and associates of the Grain Crops Research Institute and the Plant Protection Research Institute in South Africa. (J. Nematol. 21:10-15, 1989)

Of three herbicidal metabolites extracted from cultures of Scopulariopsis brumptii, one (epiepoformin) completely controlled pigweed in field tests, report J. Huang and associates, Rhône-Poulenc Ag Company, Research Triangle Park, North Carolina, and Michigan State University, East Lansing. (Weed Sci. 37:123-128, 1989)

An epidemic leaf spot on spinach crops in south-central Italy caused by a nonfluorescent member of Pseudomonas syringae was reported as a new disease by C. Bazzi and associates of the Università degli Studi, Bologna, and the Ministry of Agriculture, Fisheries and Food, Harpenden, England. (Phytopathol. Mediterr. 27:1-3, 107, 1988)

A new strain of alfalfa mosaic virus was found in Venezuela on 15 of 18 weed species by M. L. Mayoral and associates at the Venezuelan Institute for Scientific Investigations, Caracas. The strain lacked inclusion bodies in cells and was sensitive to temperatures above 30 C. (J. Plant Dis. Prot. 95:635-641, 1988)

Both Fusarium crookwellense and F. graminearum cause head blight of irrigated wheat in South Africa, report D. B. Scott and associates of the Grain Crops Research Center and University of the Orange Free State. (Phytophylactica 20:317-319, 1988)

## Salute to APS Sustaining Associates

This section is designed to help APS members understand more about APS Sustaining Associates. Information was supplied by company representatives. Each month different companies will be featured. A complete listing appears in each issue of *Phytopathology*.

**Griffin Ag Products, Contact: Donnell W. Guy, Jr., P.O. Box 1847, Valdosta, GA 31603-1847; 912/242-4097.** Griffin Corp. has been serving agriculture since 1935, beginning as a seed retail store and progressing into one of the foremost agricultural chemical manufacturers in the United States today. Headquartered in Valdosta, GA, Griffin has three operating companies with research, manufacturing, sales, and marketing functions in Valdosta, Houston, TX, and Casa Grande, AZ. Griffin manufactures and markets their own brands of high quality fungicides, insecticides, and herbicides, which are used for a wide variety of crops in virtually every major U.S. agricultural market and more than 50 foreign countries. All Griffin products are marketed by Griffin Ag Products Co., Inc., in the United States and by Griffin International Corporation outside the United States.

**Gustafson, Inc., Contact: Ray Knake, Northern Regional Manager, 3124 E. Ct. Ave., Des Moines, IA 50317; 515/266-3221.** Gustafson was formed over 50 years ago as a supplier of seed treatment chemicals and equipment. The company has grown to become the largest supplier of seed treatment materials in the United States. Chemicals currently marketed include protective and systemic fungicides and insecticides. Gustafson is currently pioneering the use of biologicals as growth promotents. Its major effort at this time is in the area of systemic fungicides for control of *Phytophthora* rot rot, powdery and downy mildew control, leaf rust control, and

suppression of take-all. The company annually supports plant pathologists across the United States in an effort to increase the diseases controlled by seed treatment.

**Harris Moran Seed Company, Contact: Dr. Hasib S. Humaydan, Vice-President of Research and Development, 26239 Executive Dr., Hayward, CA 94545; 415/785-8880.** Harris Moran is a fully integrated vegetable and flower seed company and a leader in the seed industry. The company is emphasizing strong research and development, production and sales, and marketing efforts to develop and market superior proprietary products worldwide. The company's 130 years of combined research history is being augmented by implementing the most recent techniques in the areas of molecular biology, plant pathology, genetics, seed and plant physiology, and tissue culture.

**Hartman's Plants, Inc., Contact: Robert Harman, 11850 Twitty Rd., Sebring, FL 33870; 813/655-3700.**

**Heinz U.S.A., Division of H. J. Heinz Company, Contact: Davy Emmatty, Agricultural Research Center, 13737 Middleton Pike, Bowling Green, OH 43402; 419/823-1821.** Heinz U.S.A., founded in 1869, produces and markets such products as ketchup, baby food, soup, gravy, vinegar, pickles, Weight Watchers products, ALBA dry beverage mixes, chili sauce, steak sauce, pureed foods, and beans. At the company's Bowling Green, OH, and Stockton, CA, agricultural research centers, researchers develop and/or test new tomato and cucumber varieties that are used by Heinz growers in California, Iowa, Illinois, Indiana, Ohio, and Michigan growing areas. Heinz U.S.A. agricultural researchers also work with Heinz field representatives and growers to solve crop problems that may arise. Heinz provides proprietary O.P. and hybrid seeds for plants to its growers in all areas of the United States for their tomato crop.

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