

Focus

Honeybees effectively monitor environmental contaminants over large geographic areas, report J. J. Bromenshenk and S. R. Carlson of the University of Montana, Missoula, and J. C. Simpson and J. M. Thomas of Pacific Northwest Laboratory, Richland, WA. Chemical analysis of collected pollen and bees is cheaper than use of high-volume air samplers. (Science 227:632-634, 1985)

Different levels of organization in the tobacco mosaic virus structure can be displayed by means of computer graphics, according to K. Namba and associates of Brandeis University, Waltham, MA, and Vanderbilt University, Nashville, TN. Aspects of subunit packing and chain folding are distinctly illustrated. (Science 227:773-776, 1985)

A key component in a novel electrophoretic process for studying DNA molecules is the use of solid-state biochemistry, report C. R. Cantor and D. C. Schwartz of Columbia University, New York. The technique can be used for molecules up to 4 million base pairs. (Genet. Eng. News 5[1]:14-15, 1985)

Fifteen species of Fusarium were isolated from wheat kernels and vegetative parts by J. Chelkowski and associates of the University of Warsaw, Poland. Only F. culmorum, F. graminearum, F. sambucinum, and F. sporotrichioides produced mycotoxins. (Phytopathol. Mediterr. 23:43-46, 1984)

Enrichment of the phyllosphere of soybeans with Azotobacter chroococcum increased soil nitrogen 1.5 times over that of control plants, report M. A. Khalafallah and associates of the National Research Center, Cairo, Egypt. Without Rhizobium seed inoculation, less nitrogen accumulated with foliar enrichment. (Egypt. J. Microbiol. 19:21-25, 1984)

The DRFACE-computer program distinguished five groups of powdery mildews, reports A. B. van Jaarsveld of the University of the Orange Free State, Bloemfontein, South Africa. The presence of fibrosin bodies, conidium shape, conidiophore type, and basal cell shape were the most valuable characters for identifying the groups. (Phytophylactinia 16:155-166, 1984)

Verticillium chlamydosporium was the most frequently isolated parasite of cereal cyst nematode eggs in Sweden, report C. Dackman and B. Nordbring-Hertz of the Swedish University of Agricultural Sciences, Alnarp. Fifteen different fungi were isolated from stages in the nematode life cycle. (J. Nematol. 17:50-55, 1985)

Turnip yellows mosaic virus transmission through seed was reported for the first time by A. Hein of the University of Hohenheim, Stuttgart, West Germany. Up to 20% of the plants of Camelina sativa had symptoms from infected seeds. (Z. Pflanzenschutz 91:549-551, 1984)

A new morphological type of Rhizoctonia solani AG 1 was isolated from sugar beet factory waste soils by M. Hyakumachi and A. Sumino of Hokkaido University, Sapporo, Japan. The type, designated 1C, differs from types 1A and 1B in Japan and from types 1, 2, and 3 in the United States. (Ann. Phytopathol. Soc. Jpn. 50:507-514, 1984)

Verticillium wilt was reported for the first time on Jerusalem artichoke by C. Laberge and W. E. Sackston of McGill University, Quebec, Canada. (Phytoprotection 65:92, 1984)