

Focus

Microbial activity rapidly converts sulfate in forest soils to organic sulfur forms, according to W. T. Swank of the USDA-Southeastern Forest Experiment Station, Otto, NC, and J. W. Fitzgerald and J. T. Ash of the University of Georgia, Athens. The annual potential sulfur incorporated in forest floor and soil is estimated at 30 kg/ha. (Science 223:182-184, 1984)

Pseudomonas cepacia promotes nodule formation and nitrogen-fixing activity in roots of Alnus rubra by the actinomycete Frankia, reports S. Knowlton of the University of Illinois, Urbana. Nodule numbers double when P. cepacia is present. (Can. J. Bot. 61:2877-2882, 1983)

Avermectins, at one-tenth the volume, were as effective as the nematicides oxamyl and aldicarb in controlling Meloidogyne incognita in tomato fields, according to S. Garabedian and S. D. Van Gundy of the University of California, Riverside. Avermectins protected roots for 5 weeks. (J. Nematol. 15:503-510, 1983)

The first occurrence in Nigeria of rot in stored tuberous roots caused by Rhizoctonia solani and Mucor circinelloides was reported by T. Ikotun of the University of Ibadan. Penicillium oxalicum was the most frequently isolated rot-causing organism on stored yams, however. (Fitopatol. Bras. 8:1-7, 1983)

The teleomorph of Cristulariella moricola, a leaf spot fungus of annual and woody plants, has been described as a new genus and species, Grovesinia pyrimidalis, by M. N. Cline of the University of Illinois, Urbana, and J. L. Crane and S. D. Cline of the Illinois Natural History Survey, Champaign. (Mycologia 75:988-994, 1983)

A new virus disease of agapanthus was found in Italy by G. L. Rana and M. A. Castellano of the University of Bari. The virus was serologically identified as an isolate of nerine virus X. (Inf. Fitopatol. 33[6]:57-58, 1983)

A new polypore, Antrodiella citrinella, on Picea abies and Abies alba has been described by T. Niemelä and L. Ryvardeen of the University of Helsinki, Finland. This species, reported from Norway, Finland, Poland, and Yugoslavia, causes white rot. (Karstenia 23:26-30, 1983)

Inoculating potting media with Glomus fasciculatus resulted in colonization of geranium roots that persisted after transplanting, according to B. J. Biermann and R. G. Linderman of the USDA-ARS and Oregon State University, Corvallis. Growth was more uniform and leaf area and leaf, root, and shoot weights were greater than in nonmycorrhizal roots. (J. Am. Hortic. Sci. 108:972-976, 1983)

Two-year-old seedlings of Douglas-fir and ponderosa pine in granitic soil sprayed for 12 weeks with simulated acid rain were not affected by "rain" at pH 5.6, 4.0, or 3.0, but germination of Douglas-fir seedlings was reduced 30% by "rain" at pH 2.0, according to J. G. McColl and R. Johnson of the University of California, Berkeley. (Plant Soil 74:125-129, 1983)

Fresh residues of corn reduced root and shoot weights of corn seedlings more than did weathered (partially decomposed) residue, especially when roots were in direct contact with the residue layer, report G. A. Yakle and R. M. Cruce of Iowa State University, Ames. (Can. J. Plant Sci. 63:871-877)

The alkyl-phosphonates represent a novel fungicide family, according to J. Csutak and S. A. Kiss of Borsod Chemical Works, Kazincbarcika, Hungary. The chemicals are effective against tomato late blight, apple scab, and apple and grape mildews. (10th Int. Congr. Plant Prot. 1:425-430, 1983)