

Focus

Paecilomyces lilacinus is an effective biocontrol agent for the root-knot nematode (Meloidogyne incognita), according to P. Jatala of the International Potato Center, Peru. The fungus penetrates and destroys nematode eggs and parasitizes females, killing them. (Centerpoint Vol. 2, No. 2, 1981)

Nitrogen-fixing bacteria isolated from rice and jute leaves and sprayed onto wheat plants as a substitute for nitrogenous fertilizers increased yield over untreated controls by 70%. This was comparable to yield increases obtained from fertilizer treatments, report B. R. Pati and A. K. Chandra of the University of Calcutta, India. The humid tropical climate of east India is well suited for leaf nitrogen fixers. (Plant Soil Vol. 61, No. 3, 1981)

A greenhouse screening procedure for evaluating soybean resistance to the root-knot nematode was developed by R. S. Hussey and H. R. Boerma of the University of Georgia, Athens. Eggs from galled tomatoes were collected and sieved, surface-disinfected and suspended in water (1,000 eggs/ml), then applied to the base of test plants. Plants were harvested 55-66 days after inoculation and rated for infection. (Crop Sci. Vol. 21, No. 5, 1981)

Phlebia brevispora is a newly identified species, formerly known as Peniophora A, that causes white rot of southern pine and decay of utility poles and posts, according to K. K. Nakasone and W. E. Esllyn of the USDA Forest Products Laboratory, Madison, WI. (Mycologia Vol. 73, No. 5, 1981)

Grassy stunt disease, ragged stunt virus, and rice tungro virus are among the most widespread and damaging of rice diseases in Indonesia, according to L. T. Palmer and P. S. Rao of the International Rice Research Institute, West Java. Yield losses from grassy stunt and the brown planthopper were more than \$510 million during 1974-1977. Grassy stunt can be controlled by growing resistant cultivars. (Trop. Pest Manage. Vol. 27, No. 2, 1981)

An imbalance of potassium and magnesium in calcareous or heavily limed soils can result in a preferential uptake of potassium over magnesium and cause visual symptoms of magnesium deficiency in corn, according to D. W. Quinn of Great Salt Lake Minerals and Chemicals Corp., Ogden, Utah. The imbalance is intensified with potash application and can be corrected by foliar application of liquid magnesium. (Agrichem. Age Vol. 25, No. 9, 1981)

The mechanism of resistance of alfalfa to bacterial wilt appears to be associated with certain characteristics of the nitrogen-fixing process, report L. M. Bordeleau and R. Michaud of Agriculture Canada, Quebec. Wilt-susceptible clones of alfalfa respond better than resistant clones to inoculation with Rhizobium meliloti, suggesting that protection is provided by this organism. (Phytoprotection Vol. 62, No. 1, 1981)

The mycorrhizal fungus Glomus fasciculatus increased seed yield by 21% in 2 yr of field trials of soybeans grown in rice stubble at the Asian Vegetable Research and Development Center, Taiwan. The treatment also resulted in more pods per plant and was more effective in low-fertility soils, disturbed soils, and untilled rice stubble fields than in well-fertilized fields. (Centerpoint Vol. 2, No. 2, 1981)

A working definition of a phytoalexin arrived at by consensus at the NATO Advanced Study Institute is: a low molecular weight antimicrobial compound both synthesized by and accumulated in plants after exposure to microorganisms. (Phytopathol. Z. Vol. 101, No. 2, 1981)