

Focus

The soybean cyst nematode (Heterodera glycines) was found by D. H. MacDonald for the first time in Minnesota in early September 1978 in Faribault County. This is one of the leading counties in soybean production in Minnesota and is located along the Iowa border. Surveys by personnel of the Minnesota Department of Agriculture resulted in detection of the nematode in 13 additional fields within 7 miles of the initial location.

The European strain of Gremmeniella abietina, which causes Scleroderris canker and dieback of most hard pines and kills large trees, is now present in New Hampshire and Vermont and in the Canadian provinces of New Brunswick and Quebec. This is a significant extension of the range for the European strain, originally identified only in New York, according to D. Skilling and M. E. Ostry of the North Central Forest Experiment Station, St. Paul.

The first report of vomitoxin in Austrian and Canadian corn was made by R. F. Vesonder and A. Ciegler of the USDA Regional Research centers in Peoria and New Orleans, at the International Congress of Plant Protection in Washington, DC. Fusarium roseum was the principal Fusarium species isolated from the samples. Heretofore this toxin has been reported only from the United States, Japan, and South Africa.

The mycotoxins zearalonone, deoxynivalenol, and T-2 toxin were found in corn stalks harvested in 1978 that were infected with several Fusarium species, especially F. roseum 'Graminearum,' in work done by C. J. Mirocha and colleagues at the University of Minnesota. This is the first report of these toxins associated with stalk rot of corn. Such infected stalks could contribute to mycotoxicoses in farm animals.

A new fungicide, LS 74783, active mainly against phycomycetes, was described by D. Horriere and A. Chalandon at the International Congress of Plant Protection in Washington, DC. Developed in France, this fungicide has the unique property of being translocated both up and down in the plant and is effective against Phytophthora species and downy mildews of both temperate and tropical crops. It has been used on avocado, citrus, grape, hops, pineapple, rubber trees, and several ornamental and vegetable crops.

Pantomycin, a new antifungal, antibacterial, and antiviral antibiotic, has been isolated from Streptomyces hygroscopicus by S. Gurusiddaiah, L. D. Winward, D. Burger, and S. O. Graham at Washington State University, Pullman. The purified antibiotic has antifungal activity against one animal and 73 plant pathogens and antibacterial activity against nine plant and seven human pathogens; it also inhibits Newcastle disease virus, vesicular stomatitis virus, and vaccinia virus. (Mycologia Vol. 71, No. 1, 1979)

Field losses from pests in the major food crops are enormous and constitute 35% of the crop, according to S. Wittwer, Experiment Station director at Michigan State University, in remarks prepared for the International Congress of Plant Protection in Washington, DC. These pests include insects, plant pathogens, weeds, and rodents and are responsible for losses before harvest that exceed 20% in the major crops. The losses from insects predominate in most crops. Dr. Wittwer stated that chemical pesticides play a dominant role in the control of pests and would continue to do so in the foreseeable future. He noted that approximately 1.4 billion lb of synthetic organic pesticides were produced worldwide in 1976 and that the United States currently spends about \$2 billion annually for pesticides. He stated that chemical pesticides have accounted for 20% of the increases in farm output during the past 25-30 yr.