

Focus

Asparagus root filtrate depressed asparagus seedling emergence, especially when the medium was inoculated with Fusarium oxysporum f. sp. asparagi, according to L. C. Pierce and L. W. Colby of the University of New Hampshire, Durham. Autoxin was postulated to predispose seedlings to infection. (J. Am. Soc. Hortic. Sci. 112:35-49, 1987)

Injection of D-galactose or L-fucose solutions into stems or leaves arrested colonization of 1-year-old apple plants by Erwinia amylovora, according to R. C. Hignett of the East Malling Research Station in England. These substances apparently interfere with reactions at the host-pathogen interface. (Physiol. Mol. Plant Pathol. 30:131-138, 1987)

Germination of sclerotia from Aspergillus flavus in the field was reported for the first time by D. T. Wicklow of the USDA Northern Regional Research Center in Peoria, IL, and D. M. Wilson of the University of Georgia Coastal Plain Station in Tifton. Sclerotia on the soil surface germinated 8 days before the silking date under a corn leaf canopy but not on fallow, bare ground. (Trans. Br. Mycol. Soc. 87:651-653, 1986)

A method that produces 50% more of the mycotoxin diacetoxyscirpenol from Fusarium sambucinum than previous methods involves extraction with ethyl acetate, chromatography on a silica gel column, and crystallization from mixtures of ethyl acetate and hexane. According to K. E. Richardson and P. B. Hamilton of North Carolina State University, Raleigh, pure material was obtained in 96% of the yield with the technique. (Appl. Environ. Microbiol. 53:460-462, 1987)

Two applications of propiconazole to barley at Zadoks's growth stage 49 reduced net blotch severity and increased grain yield by up to 25%, according to C. G. J. van den Berg and B. G. Rossnagel of the University of Saskatchewan, Saskatoon, Canada. Chlorothalonil did not affect disease or yield. (Can. J. Plant Sci. 67:287, 1987)

Allochemicals from Palmer amaranth reduced fresh weight accumulations in onions and carrots and reduced seedling establishment of carrots in the field, according to J. M. Bradow and W. J. Connick, Jr., of the USDA Southern Regional Research Center in New Orleans. (J. Chem. Ecol. 13:185-202, 1987)

Four of 40 species of alate aphids trapped alive transmitted cucurbit potyviruses, and 92% of infective aphids were Aphis citricola or A. middletonii, reports W. C. Adlerz of the University of Florida in Leesburg. (J. Econ. Entomol. 80:87-92, 1987)

Caps of slow-growing roots of corn are long and those of fast-growing roots are short, according to P. E. Pilet of the Institute of Plant Biology and Physiology of the University of Lausanne, Switzerland. More growth inhibitor is produced in long caps. (Planta 169:600-602, 1986)

Electron microscopy showed mycoplasma-like organisms associated with witches'-broom of poplar, according to A. K. Sharma and M. Cousin of the National Institute for Agronomic Research, Versailles, France. (J. Phytopathol. 117:349-356, 1986)

Mycelial morphology may provide characters useful in identifying rust taxa independent of host, reports R. E. Nicks of the Agricultural University in Wageningen, Netherlands. Nonhost cereals such as wheat can be used to determine sporling morphology, which is distinctive for each rust before appressorium formation and is independent of host. (Can. J. Bot. 64:2976-2983, 1986)