

An ST9-associated RNA is a newly discovered type of plant infectious agent that depends on its associated virus, beet western yellows virus, for encapsidation but not for replication, according to B. K. Passmore and associates at the University of California, Davis. The agent is not a satellite virus. (Proc. Natl. Acad. Sci. 90:10168-10172, 1993)

Nectria haematococca isolated from roots of soybean plants with sudden death syndrome proved to be the ascoma stage of Fusarium solani, report T. S. Abney and T. L. Richards of Purdue University, West Lafayette, Indiana, and K. W. Roy of Mississippi State University, Mississippi State. (Mycologia 85:801-806, 1993)

The Pto gene in tomato confers resistance to races of Pseudomonas syringae pv. tomato that carry the avirulence gene avrPto, report G. B. Martin and associates at Cornell University, Ithaca, New York. Susceptible tomato plants transformed with a cDNA from a family clone became resistant. (Science 262:1432-1436, 1993)

In the Caryophyllaceae, the proportion of perennials with anther smut is five times higher than that of annuals in both Europe and North America, report P. H. Thrall and associates at the Netherlands Institute of Ecology, Heteren. Distribution of smut varies with the host life span, flower morphology, and breeding system, as well as with biochemical or physiological mechanisms. (J. Ecol. 81:489-498, 1993)

Essential oils in celery tissue inhibit Septoria apicola in culture, and resistant cultivars contain higher concentrations than do susceptible ones, according to A. Donovan, S. Isaac, and H. A. Collin of the University of Liverpool, England. (Plant Pathol. 42:691-700, 1993)

Vesicular-arbuscular mycorrhizal fungi can favor establishment of dodder parasitism on Abutilon theophrasti, report I. R. Sanders and associates at Pennsylvania State University, University Park. (Can. J. Bot. 71:1143-1146, 1993)

A 6-10% decrease in yield of spring wheat in Sweden was attributable to ozone emissions from central Europe, concluded K. Kvist of Stockholm and L. Ericson of Umeå from a study involving 17 nations. (Växtskyddsnotiser 57:13-17, 1993)

The function of the turnip crinkle virus coat protein, whether a subunit or an assembled particle, in cell-to-cell movement may be more complex than just protecting against host nucleases, according to M. M. Laakso and L. A. Heaton of Kansas State University, Manhattan. (Virology 197:774-777, 1993)

Highly virulent isolates of Leptosphaeria maculans in rapeseed can be distinguished from weakly virulent isolates by extracting DNA from organisms removed from soaked infected seeds by centrifugation, reports J. L. Taylor of NRC Plant Biotechnology Institute, Saskatoon, Saskatchewan, Canada. The method can detect as few as two infected seeds in 1,000. (Appl. Environ. Microbiol. 59:3681-3685, 1993)

Benomyl, fosetyl-Al, and metalaxyl each shorten onion roots, benomyl by reducing mycorrhizal development (Glomus sp.) and the other two by reducing growth of both plant and fungus, according to N. Sukarno and associates at the University of Adelaide, Glen Osmond, South Australia. (New Phytol. 25:139-147, 1993)

The basic cause of tomato blossom end rot is incoordination between transport of assimilates by the phloem and of calcium by the xylem during rapid cell enlargement in the distal placental tissue, according to P. Adams and L. C. Ho of Horticulture Research International, Littlehampton, England. (Plant Soil 154:127-132, 1993)