

Artificial seeds of carrot made of a somatic embryo and coatings enclosing nutrients have been improved by use of polyvinyl acetate and polyvinyl chloride for the inner coating and congealed oil for the outer coating, report J.-M. Dupuis and associates at Rhone-Poulenc Agrochimie, Lyon, France. Antibiotics, pesticides, and beneficial organisms can be injected into the nutrient bag. (Bio/Technology 12:385-389, 1994)

Treatment of rice seed with benomyl was effective against seedling rot caused by Pseudomonas glumae because of the antagonistic effect of P. fluorescens that preferentially proliferated on the treated seed, report M. Goto and associates at Shizuoka University, Shizuoka, Japan. (Ann. Phytopathol. Soc. Jpn. 60:74-81, 1994)

Interspecific hybrids of Phytophthora infestans and P. mirabilis created by S. B. Goodwin and W. E. Fry at Cornell University, Ithaca, New York, produced limited infection on potato and tomato but none on Mirabilis jalapa. A regular outcrossing mating system was demonstrated. (Exp. Mycol. 18:20-32, 1994)

Lettuce mosaic potyvirus was found in the integumentary tapetum, integument, and wall of the mature ovary but not in the embryo sac of lettuce, which indicates that seed transmission occurs only by infected pollen during fertilization, according to D. G. Hunter and J. W. Bowyer of the University of Sydney, New South Wales, Australia. (J. Phytopathol. 140:11-18, 1994)

Rapeseed green manure reduced soil populations of the dagger nematode and would make a good nematode suppressive rotation crop, according to J. M. Halbrecht of Pennsylvania State University, Biglerville. Sudan grass and sunflower green manures increased soil populations of the nematode. (J. Nematol. 26:101-102, 1994)

Used as a biocontrol agent for Parthenium spp. in Australia, Puccinia abrupta hastened leaf senescence, decreased plant dry weight and life span, and reduced flower production 10-fold, report A. Parker and associates at the International Institute of Biological Control in Ascot, England, and the Alan Fletcher Research Station in Sherwood, Queensland, Australia. (Plant Pathol. 43:1-16, 1994)

Lectins were found in 50% of 403 species of higher fungi in Great Britain, but few were AB(H)-specific serologically, reports R. T. Pemberton of the Yorkshire Blood Transfusion Service, Leeds. (Mycol. Res. 98:277-290, 1994)

Of 270 somaclones regenerated from apple leaf disks, 33% were more resistant to fire blight than the source cultivar, report A. M. Donovan and associates at Horticultural Research International, East Malling, England. Pretreatment of disks with bacteria did not aid resistance selection. (J. Horticult. Sci. 69:105-113, 1994)

Coating grapefruit with Candida guilliermondii to control postharvest diseases is commercially acceptable, according to R. G. McGuire, USDA-ARS, Miami, Florida. Treated fruit in cold storage remained free from decay 12 to 20% longer than untreated fruit. (Biol. Control 4:1-7, 1994)

Six lignans from Bupleurum salicifolium can inhibit the hatch from the potato cyst nematode, report J. A. González and associates of the Universidad de La Laguna, La Laguna, Tenerife, Spain. This is the first instance of a natural product with this nematicidal effect. (J. Chem. Ecol. 20:517-524, 1994)

Frankliniella occidentalis is a vector of a begonia isolate of Impatiens necrotic spot virus in peppermint, report J. D. DeAngelis and associates at Oregon State University, Corvallis. (J. Econ. Entomol. 87:197-201, 1994)