

# Disease Notes

**Virus Diseases of Chickpea in Spain.** G. Carazo, C. de Blas, M. Sáiz, J. Romero, and S. Castro, Departamento de Protección Vegetal, CIT-INIA, Apartado 8111, 28080 Madrid, Spain. *Plant Dis.* 77:210, 1993. Accepted for publication 10 September 1992.

Chickpea (*Cicer arietinum* L.) plants showing symptoms suggestive of viral infections, such as mosaic, yellowing, and wilting, were observed in several fields in the regions of Castilla-León in northwestern Spain and Badajoz and Córdoba in southwestern Spain. Approximately 10% of the plants showed these symptoms. Three viruses were identified by the plate-trapped form of ELISA and alkaline phosphatase-conjugated protein A: the luteoviruses bean leaf roll virus (BLRV) and beet western yellows virus (BWYV) and the cucumovirus cucumber mosaic virus (CMV). CMV was mechanically transmitted to tobacco plants, but the luteoviruses were not. *Myzus persicae* Sulzer was an efficient vector for BWYV but did not readily transmit BLRV from chickpea to chickpea. Of the 78 samples assayed, 26 were positive for CMV, 18 were positive for BLRV, 26 were positive for BWYV, 7 were positive for both BLRV and BWYV, and 1 was positive for both CMV and BWYV. No potyviral infection was found using anti-PTY monoclonal antibody. To our knowledge, this is the first report of viruses infecting chickpeas in Spain.

**First Report of Target Spot Disease Caused by *Corynespora cassiicola* on Vegetable Crops in Trinidad.** G. Bala, F. Hosein, G. Rajnauth, A. Dilbar, A. St. Hill, and S. Parbu, Central Experiment Station, Ministry of Food Production and Marine Exploitation, Centeno, P.O. Arima, Trinidad. *Plant Dis.* 77:210, 1993. Accepted for publication 8 June 1992.

*Corynespora cassiicola* (Berk. & M.A. Curtis) C.T. Wei, causal agent of target spot disease, was previously observed on leaves of papaya (*Carica papaya* L.) in Trinidad and now is occurring on tomato (*Lycopersicon esculentum* Mill.), cucumber (*Cucumis sativus* L.), and cowpea (*Vigna unguiculata* (L.) Walp.). *C. cassiicola* was consistently isolated from diseased material. Koch's postulates were demonstrated on these crops by incubating plants in polyethylene tents after spraying them with spore suspensions ( $10^6$  ml<sup>-1</sup>) of the isolates and reisolating the pathogen from inoculated leaves. The identity of the fungus was confirmed by the International Mycological Institute (IMI nos. 35 0883-4 and 351700). The pathogen is distributed throughout Trinidad and is contributing, with other established diseases, to severe necrosis and defoliation in tomato and cucumber crops. The importance of the disease in cowpea and other vegetable crops is being determined.

**Isolation of *Botryosphaeria stevensii*, Cause of *Botryosphaeria* Canker, from Rocky Mountain Juniper in Iowa.** P. H. Flynn and M. L. Gleason, Department of Plant Pathology, Iowa State University, Ames 50011-1020. *Plant Dis.* 77:210, 1993. Accepted for publication 23 September 1992.

A canker disease was found on 20 trees of *Juniperus scopulorum* Sarg. 'Wichita Blue' in a windbreak in north central Iowa during 1991. Symptoms included reddish brown to tan foliage, branch dieback, and death of some trees. Outer bark showed little evidence of cankers, but when outer bark was removed at the bases of killed branches, cankers were evident as areas of necrotic phloem and chocolate-brown discoloration in the outer sapwood. Small, black pycnidia were evident beneath the outer bark in cankers and on dead branches. Cultures derived from macroconidia in pycnidia and from isolations from canker margins on acidified potato-dextrose agar were identified as *Diplodia mutila* (Fr.:Fr.) Mont. (teleomorph: *Botryosphaeria stevensii* Shoemaker). Microconidia were not observed in lesions or in culture. Identity of the pathogen was confirmed by N. A. Tisserat (*personal communication*). This is the first published report of occurrence of *Botryosphaeria* canker of juniper outside of Kansas (1).

Reference: (1) N. A. Tisserat et al. *Plant Dis.* 72:699, 1988.

**Black Sheath Rot Caused by *Gaeumannomyces graminis* var. *graminis* on Rice in Florida.** L. E. Datnoff, Everglades Research and Education Center, University of Florida, Belle Glade 33430-8003; M. L. Elliott, Fort Lauderdale Research and Education Center, University of Florida, Fort Lauderdale 33314; and D. B. Jones, University of Florida, Belle Glade 33430-8003. *Plant Dis.* 77:210, 1993. Accepted for publication 16 October 1992.

During the excessively warm, wet summer of 1991, symptoms of black (crown) sheath rot were observed on rice (*Oryza sativa* L.) growing in several commercial fields in the Everglades Agricultural Area of South Florida. Symptoms consisted of a brown discoloration of the sheaths beginning at the waterline and continuing up the plant. Numerous black perithecia with distinctive necks were found embedded in the discolored areas, especially near the flag leaf. Perithecia were about 200–350  $\mu$ m in diameter, with asci 75–125  $\times$  9–14  $\mu$ m, containing eight hyaline, slightly curved ascospores, three to seven septate, measuring 75–95  $\times$  2–5  $\mu$ m. Ascospores were single-spored onto water agar and, after germinating, were transferred to PDA + streptomycin sulfate. Mycelia were observed with brown lobed hyphopodia. These characteristics are consistent for *Gaeumannomyces graminis* (Sacc.) Arx & D. Olivier var. *graminis*. Autoclaved rice seed was artificially infested with actively growing mycelia of *G. g. graminis*. After 30 days, pasteurized soil mix was infested with this inoculum and planted with rice cv. Lemont. About 20 days later, rice seedlings developed symptoms of black sheath rot, and the fungus was reisolated. This is the first report of *G. g. graminis* on rice in Florida.

**Spread of Stony Pit of Pear Cultivar Bosc in Ontario.** W. R. Allen and N. Greig, Agriculture Canada, Research Station, Vineland Station, Ontario, Canada L0R 2E0. *Plant Dis.* 77:210, 1993. Accepted for publication 20 October 1992.

The incidence of trees with pitted fruit in three pear (*Pyrus communis* L. 'Bosc') plantings on a farm in the Niagara Peninsula was recorded yearly from 1985 to 1991. In 1985, the 224 trees in planting 1 were 15 yr old, the 256 trees in planting 2 were 20 yr old, and the 336 trees in planting 3 were 34 yr old. By 1991, disease incidence in the plantings had increased from 3.1, 5.9, and 1.8% to 11.2, 12.1, and 3.3%, respectively. With all plantings in 1991, the disease was distributed over nine to 29 rows north to south and over eight to 20 rows west to east. The planting with the lowest disease incidence was surrounded by a vineyard, and the other two plantings were bordered by a wooded headland on the west and by sour cherry trees or vines on the other sides. Vector-mediated movement of the causal agent was suggested by: 1) failure of recently diseased trees to show stony pit for 15–34 yr, 2) occurrence of new infections each year, and 3) higher incidences of disease in plantings adjacent to the headland.

**Susceptibility of *Capsicum chinense* PI 159236 to Tomato Spotted Wilt Virus Isolates in Brazil.** L. S. Boiteux and T. Nagata, CNPH/EMBRAPA, CP 0218, 70359 Brasília (DF), Brazil. *Plant Dis.* 77:210, 1993. Accepted for publication 31 August 1992.

A screening program has been initiated at CNPH to look for sources of resistance against tomato spotted wilt virus (TSWV) in *Capsicum* spp. germ plasm. *C. chinense* Jacquin (PI 159236), previously reported as resistant to TSWV (1), reacted with concentric necrotic local lesions against eight TSWV isolates. Similar reaction has been reported as a resistance response to the virus (1). However, three isolates induced systemic infection (general necrosis and overall stunting) in all mechanically inoculated plants of the PI 159236 line. Breakdown of resistance was also observed under field conditions. Visual analysis and ELISA determined that systemic infection was not induced with the other five isolates. Immunodiffusion tests showed that virulent (resistance-breaking) and avirulent isolates are related but serologically distinct. This is the first report of *C. chinense* as a natural systemic host of TSWV.

Reference: (1) L. L. Black et al. *Plant Dis.* 75:863, 1991.