Disease Notes

Black Dot of Potato Caused by *Colletotrichum coccodes* in Nebraska. Alexander D. Pavlista and Eric D. Kerr, University of Nebraska, Panhandle Research and Extension Center, Scottsbluff 69361. Plant Dis. 76:1077, 1992. Accepted for publication 10 June 1992.

Tubers of potato (*Solanum tuberosum* L.) cv. Monona with dark, grayish lesions on the surface were collected from storage in Box Butte County, Nebraska, in December 1988. Isolates on potato-dextrose agar were identified as *Colletotrichum coccodes* (Wallr.) S.J. Hughes, the cause of potato black dot. Pathogenicity was confirmed by fulfilling Koch's postulates on Monona tubers. Vines of cv. Russet Burbank potatoes grown in north central Nebraska in 1989 and 1990 were girdled by stem lesions in August. Small black sclerotia were abundant in stem lesions above and below ground level. Earlier in the season, foliage of infected plants showed yellowing and wilting. Amethyst coloration of inner tissues was observed in stem bases and near leaf attachments. Sclerotia and amethyst coloration were also observed on tuber stolons and underground stems where the periderm was sloughed away. Stolon attachments with amethyst coloration and black sclerotia have been found on stored tubers from western and northern Nebraska. The incidence and severity of black dot in Nebraska potato fields have not been investigated, and the disease may be misdiagnosed as Verticillium wilt or early blight without careful examination. Extremely dry, hot weather during the 1988–1990 seasons may have favored development of severe black dot symptoms.

First Report of *Arthrinium arundinis* Causing Kernel Blight on Barley. Concepción Martínez-Cano, William E. Grey, and David C. Sands, Department of Plant Pathology, Montana State University, Bozeman 59717-0314. Plant Dis. 76:1077, 1992. Accepted for publication 16 July 1992.

Barley (*Hordeum vulgare* L.) kernel blight is characterized by a brown discoloration in the basal portion of the kernel. Several pathogenic bacteria and fungi were isolated from discolored barley kernels harvested from plants grown at Fairfield, Montana. Among the pathogens was *Arthrinium arundinis* Dyko & Sutton, a saprophyte of decaying grasses. On potato-dextrose agar, *A. arundinis* is characterized by white mycelia and coconut-shaped brown conidia borne laterally on short to nondistinguishable conidiophores. Koch's postulates were completed using barley cv. Busch 2601, inoculated at dough stage with a conidial suspension (10^6 spores per milliliter) of *A. arundinis*. Plants were incubated in a growth chamber at 100% relative humidity for 48 hr and transferred to the greenhouse at 24 C until harvest. The average frequency of discolored kernels was 45%, and *A. arundinis* was isolated from all diseased kernels. Barley grown in highly humid environments may be susceptible to kernel blight caused by a saprophyte such as *A. arundinis*.

First Report of Citrus Vein Enation Disease in China. G. Q. Chen and S. X. Yan, Citrus Research Institute, Zhejiang Academy of Sciences, Huangyan, Zhejiang Province, 317400 People's Republic of China, and C. N. Roistacher, Department of Plant Pathology, University of California, Riverside 92521. Plant Dis. 76:1077, 1992. Accepted for publication 1 June 1992.

Small leaf enations characteristic of the disease caused by the citrus vein enation virus (CVEV) were observed on leaves of six local commercial citrus varieties in the field in the Huangyan District of Zhejiang Province, China. These were Mang-ju (*Citrus tardiferax* Hort. ex Tan.), Zhao-ju (*C. subcompressa* Tan.), Ben-di-zao (*C. succosa* Hort. ex Tan.), New Ben No. 1 (a selection of Ben-di-zao), Ponkan (*C. poonensis* Hort.), and Satsuma mandarin (*C. unshiu* Markovich). Diagnosis was made by topworking the more sensitive *C. volkameriana* (Ten. & Pasq.) to field trees and checking for symptoms of vein enation, by graft transmission to indicator seedlings of Rangpur lime, and by vector transmission with the brown citrus aphid (*Toxoptera citricida* (Kirkaldy)) to seedlings of Daidai sour orange. Many of the inoculated indicator plants developed the characteristic leaf vein enation symptoms as originally described by Wallace and Drake (1). There appeared to be no tree damage associated with CVEV. Woody galls, usually associated with this virus on rough lemon, were not observed on the prevalent rootstocks of trifoliate orange or Gou-tou-cheng (a *C. aurantium* L. hybrid). In 1956, CVEV was found by C. N. Roistacher and E. M. Nauer (Proc. 4th Conf. IOCV) in PI 209532 (*C. sinensis* (L.) Osbeck 'Paak Ling Mung') at the USDA foreign introduction facility at Glenn Dale, Maryland. This suggests that CVEV may have been present in China for a long time. CVEV probably is widespread in many of the cooler growing regions of China. Vein enation is a cool temperature disease and highly transmissible by *T. citricida*. The disease is widespread in citrus in the coastal areas of California, South Africa, Peru, India, Réunion, and the Aegean coast of Turkey.

Reference: (1) J. M. Wallace and R. J. Drake. Citrus Leaves 2:22, 1953.

Powdery Mildew Caused by *Erysiphe cichoracearum* on Five New *Eucalyptus* Hosts in Arizona. M. E. Matheron and J. C. Matejka, Yuma Agricultural Center, University of Arizona, Yuma 85364. Plant Dis. 76:1077, 1992. Accepted for publication 9 July 1992.

In February 1992, conidia and mycelia of powdery mildew were observed on 1-yr-old plants of *Eucalyptus cladocalyx* F.J. Muell., *E. viminalis* Labill., *E. camaldulensis* Dehnh., *E. leucoxylon* F.J. Muell., and *E. polyanthemos* Schauer growing in a greenhouse in Arizona. *E. citriodora* Hook., *E. globulus* Labill., and *E. maculata* Hook. plants of the same age in the same greenhouse showed no symptoms of the disease. Both sides of leaves of affected plants were covered with mycelia and conidiophores. The ellipsoid conidia were in chains, did not contain fibrosin bodies, and conformed to those of *Erysiphe cichoracearum* DC. At the time symptoms appeared, maximum and minimum temperatures in the greenhouse were 32.5 and 16.3 C, respectively. This pathogen has been described on 11 species of *Eucalyptus* growing in greenhouses in California (1), but this is the first report of *E. cichoracearum* in the United States on the species of *Eucalyptus* named here.

Reference: (1) M. W. Gardner et al. Plant Dis. Rep. 54:399, 1970.

First Report on Formation of Sclerotia of *Claviceps purpurea* on Bermudagrass (*Cynodon dactylon*). K. E. Conway, Department of Plant Pathology, and C. M. Taliaferro, Department of Agronomy, Oklahoma State University, Stillwater 74078; and R. A. Shelby, Department of Plant Pathology, Auburn University, Auburn, AL 36849. Plant Dis. 76:1077, 1992. Accepted for publication 2 July 1992.

The formation of honeydew on bermudagrass (*Cynodon dactylon* (L.) Pers.) by *Claviceps purpurea* (Fr.:Fr.) Tul. has been reported (1) and its anamorph has been isolated from bermudagrass, but sclerotia have never been reported on that host. Cultures from bermudagrass produce fluorescent alkaloid toxins in vitro and have been implicated in the production of cattle tremors, but such toxins have not been detected from the honeydew stage. Infection of bermudagrass by the honeydew stage of *C. purpurea* was severe during the fall of 1991 throughout Oklahoma. Sclerotia were found on two breeding lines and two plant introductions of bermudagrass near Stillwater, Oklahoma, during October. Sclerotia were produced in 20–50% of the seeds per head of line BERPC 91-6 but in <1–5% of those of clone 9945 and the two plant introductions. Samples of infected seed heads with sclerotia were extracted and analyzed by high-performance liquid chromatography. Two toxins, ergotamine and an unknown substance, were indicated by fluorescence detection, a technique that denotes only fluorescent alkaloids, mainly ergopeptins, and not clavines (2). The presence of sclerotia with toxic alkaloids in honeydewed bermudagrass hay could pose a health threat to cattle.

References: (1) K. E. Conway and C. M. Taliaferro. (Abstr.) Phytopathology 80:1043, 1990. (2) R. A. Shelby and V. C. Kelley. J. Agric. Food Chem. 38:1130, 1990.