Disease Notes

A Disease Similar to Greasy Spot but of Unknown Etiology on Citrus Leaves in Argentina. G. M. Marcó, Estación Experimental, Concordia, Entre Rios, Argentina, and J. O. Whiteside, Citrus Research and Education Center, Lake Alfred, FL 33850. Plant Disease 70:1074, 1986. Accepted for publication 3 June 1986.

In northeast Argentina, a serious leaf spot disease of sweet orange (Citrus sinensis (L.) Osbeck) and other Citrus spp. is so similar in appearance to greasy spot caused by Mycosphaerella citri Whiteside that it was previously assumed to be greasy spot. With both diseases, hypertrophy and eventual gummosis in the spongy mesophyll occur, and pressure on the lower leaf surface is sufficient to raise, but not rupture, the epidermis. The first indication of a difference in etiology was a lack of M. citri ascocarps on fallen, decomposing citrus leaves. Also, the Argentine material did not show persistent appressoria in the outer stomatal chambers or filamentous hyphae in the diseased spongy mesophyll, characteristic of M. citri. Another difference from greasy spot was the presence of numerous, as yet unidentified spherical structures 2-12 μ m in diameter in and near the necrotic mesophyll tissue, mostly just within the lower epidermis. Although the disease in Argentina is not caused by M. citri, a fungal cause is still considered probable because foliar applications of copper fungicides provide good control.

First Report of Ascochyta Leaf Spot Caused by Ascochyta hordei var. americana on Barley in New York. C. S. Huftalen and G. C. Bergstrom, Department of Plant Pathology, Cornell University, Ithaca, NY 14853. Plant Disease 70:1074, 1986. Accepted for publication 2 July 1986.

During March and April of 1984, 1985, and 1986, irregular-shaped tan lesions with associated chlorosis were observed near the tips of lower leaves of several lines of winter barley (Hordeum vulgare L.) at early tillering in breeding nurseries near Ithaca, New York. The fungus Ascochyta hordei Hara var. americana Punith. was consistently isolated from the lesions; identification was based on yellow-brown submerged pycnidia, $157 \pm 33 \,\mu$ m in diameter, with characteristically darkened cells around the ostiole. Conidia were medianly uniseptate, hyaline to pale yellow, and $25.2 \pm 1.8 \,\mu\text{m} \times 5.5 \pm 0.4 \,\mu\text{m}$. Pathogenicity was confirmed on seedlings of Birka barley, and the fungus was successfully reisolated. To our knowledge, this is the first report of this fungus causing disease on any cereal in the northeastern United States; A. hordei is regarded as a minor pathogen on barley and wheat in northwestern states. Symptom development did not progress past the lower leaves on any of the plants we observed. Incidence of this disease may be underestimated because of the similarity of foliar symptoms to those induced by frost injury.

First Report of Tomato Aspermy Virus in Arkansas. I. B. Ahmad and H. A. Scott, Department of Plant Pathology, University of Arkansas, Fayetteville 72701. Plant Disease 70:1074, 1986. Accepted for publication 22 July 1986.

A virus isolated from tomato plants (*Lycopersicon esculentum* Mill.) in central Arkansas showing leaf mottling and distortion was tentatively identified as tomato aspermy virus (TAV) by routine serological tests. Comparisons of this virus (TAV-A) with TAV-C from Canada (1) showed the two isolates to be similar or identical in biological, biophysical, and biochemical properties. Purified preparations of TAV-A and TAV-C had sedimentation coefficients of 97 and 98 S and protein subunit molecular weights of 26,600 and 26,500, respectively. Both viruses are icosahedral particles, 28 nm in diameter, containing four nucleic acids with molecular weights of 1.2, 1.1, 0.9, and 0.45×10^6 . The viruses were serologically identical in reciprocal gel diffusion tests and incited similar symptoms in extensive host range studies. This is the first report of TAV in Arkansas. The isolate is considered to be identical to TAV-C.

Reference: (1) R. Stace-Smith and J. H. Tremaine. Virology 51:401, 1973.

Corynespora Bract Spot of Euphorbia pulcherrima in Florida. A. R. Chase, IFAS, University of Florida Agriculture and Research Education Center, Apopka 32703, and G. W. Simone, Department of Plant Pathology, University of Florida, Gainesville 32611. Plant Disease 70:1074, 1986. Accepted for publication 11 July 1986.

A bract spot of poinsettia (Euphorbia pulcherrima Willd.) has occurred each winter since 1982 in central Florida nurseries. Black lesions up to 3 cm in diameter appear on bract margins and tips and sometimes on leaves, often resulting in plant loss. Isolations yielded *Corynespora cassiicola* (Berk. & Curt.) Wei. Five poinsettias each were inoculated with one of four conidial suspensions $(1 \times 10^4 / \text{ml})$ or water to runoff under intermittent mist for 24 hr before and 14 days after inoculation. Typical lesions occurred on bracts of plants inoculated with *C. cassiicola*, and the pathogen was reisolated from symptomatic tissue only. Inoculations of poinsettia with isolates of *C. cassiicola* from *Aeschynanthus pulcher* (Blume) G. Don (1), *Ficus benjamina* L. (2), *Ligustrum sinense* Lour., *Lycopersicon esculentum* L. (Mill.) Karst ex Fariv., and *Saintpaulia ionantha* H. Wendl. resulted in typical bract spot for each isolate within 14 days. No indication of host specificity was noted (2).

References: (1) A. R. Chase. Plant Dis. 66:739, 1982. (2) A. R. Chase. Plant Dis. 68:251, 1984.

First Report of *Colletotrichum acutatum* on Strawberry in the United States. B. J. Smith, USDA-ARS, Poplarville, MS 39470, and L. L. Black, Department of Plant Pathology and Crop Physiology, Louisiana State University Agricultural Center, Baton Rouge 70803. Plant Disease 70:1074, 1986. Accepted for publication 11 July 1986.

Colletotrichum acutatum Simmonds was isolated during the spring of 1983 from strawberry (Fragaria \times ananassa Duch. 'Cardinal') growing in Mississippi fields established with nursery plants from Arkansas. Fruit and petiole lesions were common, and crown lesions occurred on scattered wilted plants. C. acutatum was isolated consistently from each of these lesion types. Additional isolates, identified in our laboratory as C. acutatum, came from Florida (C. Howard) and Missouri (W. Goff) strawberry fields established with Arkansas-grown plants and from California (S. Wilhelm) fields established with California-grown plants. Spray inoculations of cv. Tioga plants with conidial suspensions $(1.5 \times 10^6 \text{ conidia/ml})$ of the Mississippi C. acutatum isolates resulted in fruit, petiole, and crown lesions with wilting of crown-infected plants. Reisolations from each lesion type yielded isolates with characteristics of the one used to inoculate the host. C. acutatum had been reported on strawberry in Australia and New Zealand (1) but has not been reported on strawberry in the United States or been previously shown to cause a crown rot and wilt disease.

Reference: (1) J. H. Simmonds. Queensl. J. Agric. Anim. Sci. 22:437, 1965.

Tomato Pith Necrosis (*Pseudomonas corrugata*) in Field-Grown Tomatoes in Louisiana. W. P. Bond, Department of Biological Sciences, Southeastern Louisiana University, Hammond 70402, and L. L. Black, Department of Plant Pathology and Crop Physiology, Louisiana State University Agricultural Center, Baton Rouge 70803. Plant Disease 70:1074, 1986. Accepted for publication 22 July 1986.

Pseudomonas corrugata Roberts & Scarlett was first identified as the causal agent of tomato pith necrosis in England in 1978 (2). The disease was initially recognized in the United States in 1981 and 1982 in California and Florida (1), respectively. The disease was first observed in Louisiana in field-grown tomatoes (Lycopersicon esculentum Mill. 'Floradel') during the spring of 1983 and has since been seen each year in several areas of the state. Diseased plants with symptoms that include elliptical dark brown to black stem and petiole lesions, stem splitting, hollow stems, and profuse adventitious root development occur scattered in tomato fields. P. corrugata, a nonfluorescent pseudomonad, was isolated consistently from diseased tissues and produced pith necrosis when injected (0.5 ml, 10^7 cfu/ml) into 4-wk-old greenhouse-grown 'Bonny Best' tomato plants. Cultural, biochemical, and physiological characteristics of two Louisiana isolates of the bacterium were similar in comparative studies to those of known isolates of P. corrugata from Florida (1).

References: (1) J. B. Jones et al. Plant Dis. 67:425, 1983. (2) C. M. Scarlett et al. Ann. Appl. Biol. 88:105, 1978.

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