

NEW DISEASE REPORT

First report of leaf spot caused by *Curvularia verruculosa* on *Cynodon* sp. in Hubei, ChinaJ. Huang^a, L. Zheng^a and T. Hsiang^{b*}^aDepartment of Plant Protection, Huazhong Agricultural University, Wuhan, Hubei, 430070, China; and ^bDepartment of Environmental Biology, University of Guelph, Guelph, Ontario, N1G 2W1, Canada

Curvularia leaf spot affects many species of grasses worldwide and is commonly caused by *Curvularia eragrostidis*, *C. geniculata*, *C. intermedia*, *C. inaequalis*, *C. lunata*, *C. pallescens*, *C. protuberata* or *C. trifolii* (Smith *et al.*, 1989). Weng *et al.* (1997) found that the most frequent disease of warm season grasses in southern China was caused by *C. lunata*, and *C. affinis* has been found on *Festuca arundinacea* (Huang *et al.*, 2004). There have been no other reports of *curvularia* leaf spot from central China.

In August 2003, symptoms were observed in Wuhan, China, at a sports field on a *Cynodon dactylon* × *C. transvaalensis* hybrid. Yellow-brown spots of varying shape were formed on leaves and sheaths. The spots measured up to 1 cm in diameter: disease incidence was 5%. Isolations were made on acidified potato dextrose agar and after 2 days at 25°C, 8-mm-diameter cultures with appressed, white mycelium were observed. After 2 days more, the enlarging colonies acquired a greenish cast, which yielded spores of *C. verruculosa* (Ellis, 1966) with a rough-to-verrucose surface, three septa and an average size of 24.9 × 10.3 µm. The two central cells were larger and darker than the terminal cells. Sequencing of the ITS region of ribosomal DNA showed a 99.6% match with a *C. verruculosa* sequence in GenBank.

Pathogenicity was tested by inoculating field-grown plants. Ten stems, 12 cm long, were placed in Petri plates layered with moist tissue paper. Each stem was inoculated with two 5-mm-diameter mycelial plugs and the plates

were incubated at 25°C, under continuous fluorescent light. The plugs were removed after 48 h, and within 24 h small spots appeared. Within 2 days after that, these spots had enlarged up to 1 cm in diameter, turning yellow-brown, with irregular shapes as seen in the field. No spots were seen on uninoculated stems. Isolations from spot margins, away from inoculated areas, yielded spores of *C. verruculosa*.

This fungus has been reported previously on graminaceous genera such as *Buchloe*, *Chloris*, *Oryza*, *Paspalum*, *Pennisetum*, *Sorghum*, *Triticum*, *Typha* and *Zea* (Sivanesan, 1987), but this is the first report on *Cynodon*. The spores are similar in morphology to those of *C. lunata* except for the verrucose surface. Past diagnoses of *curvularia* leaf spot may have mistakenly identified *C. verruculosa* as *C. lunata*.

References

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