First report of *Colletotrichum fructicola* causing anthracnose on *Crinum asiaticum* in Guangxi province, China

Zhen Qing¹ · Dan Xiao¹ · Haiyun Chen¹ · Yanan Shen¹ · Limei Pan² · Ronghui Wen¹

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Crinum asiaticum (family Amaryllidaceae) is an ornamental medicinal plant grown in gardens in tropical and subtropical countries. In September 2018, red spots and irregular light-brown necrotic lesions were observed on *C. asiaticum* plants with an approximated incidence of 32% in the Nanning Botanical Garden of Medicinal Plants, Guangxi Province, China. The ornamental and medicinal value of *C. asiaticum* was significantly affected. The causal agent was isolated from small pieces of the symptomatic disinfested leaf by culturing on potato dextrose agar. Colonies went from white to gray with age, occasionally producing orange conidial masses. Conidia were $15.76 \pm 1.4 \mu\text{m} \times 6.10 \pm 1.1 \mu\text{m}$, hyaline, unicellular, and cylindrical. Using the method of Multilocus Sequence Analysis, identification was confirmed by amplification and sequencing of five DNA regions corresponding to the internal transcribed spacer (ITS), actin (ACT), β -tubulin (TUB2), chitin (CHS-1), and glyceraldehyde 3-phosphate dehydrogenase (GAPDH) (Damm et al. 2012). The sequences had high similarity with *Colletotrichum fructicola* accessions: ACT 100% with KR262555.1, ITS 99.8% with MF153385.1, GAPDH 99.6% with MH463893.1, CHS-1 99.6% with MN075573.1 and TUB2 99% with MF111053.1, respectively. Sequences were deposited in the GenBank with accession numbers MK935145 (ITS), MK922605 (ACT), MK922607 (TUB2), MK922608 (CHS-1), and MK922606 (GAPDH). To verify pathogenicity, spore suspensions (10^5 conidia/ml) were prepared from 12-day-old PDA cultures and then inoculated into 2-month-old *C. asiaticum* plants using the wound inoculation

method (Xu and Ko 1998). Control plants were established using sterile water during the inoculation process. All plants were placed in a growth chamber with a temperature of 26 °C. After five days, anthracnose symptoms identical to those observed in the field, developed on the inoculated leaves, and no symptoms on the control leaves. A fungus with the same colony and conidial morphology as *C. fructicola* was reisolated from leaf lesions on the inoculated leaves, thus confirming Koch's postulate. *C. fructicola* has already been reported on *C. asiaticum* in Yunnan province, China (Yang et al. 2009), however, to our knowledge, this is the first report of anthracnose caused by *C. fructicola* on *C. asiaticum* in Guangxi province, China.

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✉ Ronghui Wen
wenrh@gxu.edu.cn

¹ State Key Laboratory for Conservation and Utilization of Subtropical Agro-bioresources, College of Life Science and Technology, Guangxi University, Nanning, China

² Guangxi Botanical Garden of Medicinal Plants, Nanning, China