Disease Notes (*continued*)

First Report of Fusarium Wilt Caused by *Fusarium oxysporum* f. sp. *basilici* on *Ocimum minimum* in Portugal. M. Felgueiras and A. Dias, Universidade do Minho, Departamento de Biologia, Campus de Gualtar, 4710-057 Braga, Portugal and CITAB Centre for the Research and Technology of Agro Environmental and Biological Sciences, Apt. 1013, 5001-911, Vila Real, Portugal; G. Chicau, Direcção Regional de Agricultura e Pescas, Norte, Laboratório de Protecção das Culturas, Estrada exterior à Circunvalação, nº 11846, 4460-281, Senhora da Hora, Portugal; and M. Berbegal, M. León, and J. Armengol, Instituto Agroforestal Mediterráneo, Universidad Politécnica de Valencia, Camino de Vera s/n, 46022 Valencia, Spain. Plant Dis. 94:1170, 2010; published online as doi:10.1094/PDIS-94-9-1170A. Accepted for publication 21 June 2010.

Ocimum minimum L. (fine-leaved basil) is cultivated along the Douro Litoral Region in Portugal. In June 2009, a disease was observed in fine-leaved basil fields in three geographically separated locations: Maia, Rio Tinto, and São Mamede Infesta. Affected plants showed wilt symptoms, chlorotic leaves, and stem necrosis. Discolored vascular tissue was observed when the stems were cut longitudinally. For isolation, crown and stem sections (10 cm long) were surface disinfected for 1 min in 1.5% NaOCl and washed twice with sterile distilled water. The sections were cut longitudinally and small pieces of discolored vascular tissue were plated onto potato dextrose agar (PDA) amended with streptomycin sulfate (0.5 g liter^{-1}). Plates were incubated at 25°C in the dark. *Fusarium* colonies were consistently isolated from symptomatic plants sampled from the three different locations and transferred to PDA and Spezieller Nährstoffarmer agar (SNA) culture media for morphological species identification (2). After 10 days of incubation at 25°C, all isolates were identified as *F. oxysporum*. A PCR-based assay was conducted with nine single-spored isolates (F2, F3, F4, F7, F8, F9, F10, F11, and F13) using the *F. oxysporum* f. sp. *basilici* specific primer pair, Bik 1 and Bik 2 (1). A single DNA fragment of 382 bp was amplified in all isolates, which confirmed the identification of *F. oxysporum* f. sp. *basilici*. Pathogenicity of all nine isolates was determined on 2-month-old fine-leaved basil seedlings growing in sterile peat moss. Plants were inoculated by watering the roots with 20 ml of a conidial suspension (10^6 conidia ml^{-1}) harvested from 3-week-old cultures grown on PDA. Thirty-six replicates (each one in individual pots) for each isolate were used, with an equal number of control plants. Plants were maintained in a greenhouse at 15 to 20°C. Within 2 weeks of inoculation, all inoculated plants wilted and exhibited severe leaf and stem necrosis. The fungus was reisolated from vascular tissues of the crown area and the stems of symptomatic seedlings, fulfilling Koch's postulates. Control plants remained healthy. To our knowledge, this is the first report of *F. oxysporum* f. sp. *basilici* infecting fine-leaved basil in Portugal.

References: (1) A. Chiocchetti et al. Plant Dis. 85:607, 2001. (2) J. F. Leslie et al. The *Fusarium* Laboratory Manual. Blackwell Publishing, Ames, IA, 2006.