

IDENTIFICATION AND MORPHOLOGICAL CHARACTERIZATION OF *FUSARIUM OXYSPORUM* F. SP. *OPUNTIARUM*, THE CAUSAL AGENT OF BASAL STEM ROT OF CACTUS IN FARS PROVINCE

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Abstract

Sampling from infected cacti from Shiraz (Fars, Iran) with roots and the basal stems soft rot symptoms, revealed some *Fusarium* sp. isolates. The isolates identified as *Fusarium oxysporum*, based on their morphological and physiological characteristics. The causal agent of disease produced orange-colored sporodochia and curved, 3 or 4-septate macroconidia, with the average size of $(33.58 \pm 4.12) \times (3.68 \pm 1.45)$ μm . Microconidia were aseptate and ellipsoid, on short filialides as false heads. Their average size was $(8.57 \pm 2.35) \times (3.21 \pm 1.14)$ μm . Isolates produced single or double chlamydospores with the average size of $(8.10 \pm 1.47) \times (7.60 \pm 1.32)$ μm . Pathogenicity tests showed the isolates are pathogenic on major genus of cactus such as *Cereus* sp., *Opuntia* sp., *Echinocactus* sp., *Ferocactus* sp. and *Notocactus* sp., but other tested crops including maize, zucchini, mung bean, kidney bean, egg plant, melon, sunflower, tomato and broad bean did not show any symptoms. According to the host range, morphological and physiological features the isolates identified as *F. oxysporum* f. sp. *opuntiarum* (1).

Keywords: Fusarium rot, *forma specialis*, Host range

See Persian text for figures and tables (Pages ??-??).

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