

Short Article

STUDY OF ESCA AND PETRI DISEASE OF GRAPEVINE IN KERMAN PROVINCE*

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Abstract

A field survey was conducted during spring and summer of 2010 from vineyards in different areas of Kerman province including Khanook, Mohy Abad, Qhavam Abad, Hamidiyeh, Mahan, Arab Abad, Sirjan, Sirch, Kerman, Bardsir, Joupar, Hootk, Chatroud, Golbaf, Dalfard and Rabor in order to determine the prevalence of esca and Petri diseases of grapevine in this province. Samples were taken from grapevines showing the following symptoms: interveinal chlorosis and leaf necrosis, reduced growth, wilting and wood and xylem discoloration in cross section. Isolations were made from affected wood tissues on MEA and PDA media. The isolates were identified based on morphological and cultural characteristics. A total of 216 fungal isolates were obtained from grapevines showing decline disease symptoms. The most important fungal isolates associated with grapevine showing decline symptoms in most vineyards were *Phaeoacremonium aleophilum* (= *Pm. aleophilum*) (20.83%), *Phaeoconiella chlamydospora* (11.11%) and *Pm. parasiticum* (6.95%). In this study, esca and Petri disease symptoms were observed on 28.57% and 71.43% of visited vineyards, respectively. Moreover, the proportion of grapevines with Petri disease (76.75%) was much greater than those with esca (23.25%). Our results show the importance of Petri disease in most of the Kerman province viticultural areas.

Keywords: Grapevine decline, *Phaeoacremonium* spp., *Phaeoconiella chlamydospora*.

See Persian text for figures and tables (Pages ۲۷۷ – ۲۸۳).

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