

PHYTOPHTHORA ROOT AND CROWN ROT OF SEVERAL FIELD AND ORCHARD CROPS IN GORGAN AREA *

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(Received: 10. 9. 2011; Accepted: 7. 3. 2012)

Abstract

During 2009 and 2010 growing seasons, different irrigated fields were surveyed in Gorgan region. Infected plants with symptoms such as damping off, crown and root rot, and foliar blight were collected. Samples were washed in running tap water and cultured on CMA+PARPH. Isolates were identified on the basis of morphological and some physiological characteristics. 50 isolates belonging to four species were identified. The species were: *Phytophthora citrophthora* from persimmon fruits (*Diospyros kaki*); *Phytophthora cryptogea* from kiwi trees (*Actinidia chinensis*) with root and crown rot symptoms, crown and root of potato (*Solanum tuberosum*) and gerbera (*Gerbera jamesonii*), *Phytophthora nicotianae* from tomato (*Lycopersicon esculentum*) root and stem, *Phytophthora palmivora* from root and crown of olive (*Olea europae*) seedlings and *Phytophthora inundata* from root and stem of broad bean (*Vicia faba*). All of *Phytophthora* isolates were found pathogen on their host at greenhouse conditions. Based on our knowledge isolation of *P. cryptogea* group II from kiwi and potato and *Phytophthora palmivora* from olive trees were new for Iran, also *P. inundata* from broad bean was new for Iran and the world.

Keywords: *P. palmivora*, *P. cryptogea*, *P. citrophthora*, *P. nicotianae*, *P. inundata*, Root and crown rot, Gorgan region, *Vicia faba*, *Diospyros kaki*, *Olea europae*, *Gerbera jamesonii*, *Solanum tuberosum*, *Lycopersicon esculentum* and *Actinidia chinensis*.

See Persian text for figures and tables (Pages ۲۴۹-۲۶۳).

*: A Part of MSc. Thesis of the First Author, Submitted to Gorgan University of Agricultural Sciences & Natural Resources, Gorgan, Iran.

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