

IDENTIFICATION AND PATHOGENICITY STUDY OF *Alternaria* SPP. ON POTATO IN WEST AZERBAIJAN PROVINCE (1)*

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Abstract

During the study on the *Alternaria* species from potato fields of West Azerbaijan province, foliage and stems that had suspected infections with *Alternaria* fungi were collected. Totally, 141 isolates belonging to the genus *Alternaria* were isolated and purified. Based on macro and micromorphological characters of the isolates, 9 species viz.: *A. alternata*, *A. broussonetiae*, *A. destruens*, *A. dumosa*, *A. interrupta*, *A. rhadina*, *A. solani*, *A. soliaegyptiaca* and *A. tenuissima* were identified. Among the identified species, 5 species: *A. alternata*, *A. dumosa*, *A. interrupta*, *A. solani* and *A. tenuissima* were reported previously from potato, but three species: *A. broussonetiae*, *A. rhadina* and *A. soliaegyptiaca* are new to mycoflora of Iran and are reported for the first time from potato plants (*matrix nova*). Also, potato is *matrix nova* for *A. destruens*. Pathogenicity studies on isolates of identified species were done on potato cultivar Agria and their pathogenicity were confirmed based on Koch's postulates. All the studied isolates were pathogenic, although the degree of pathogenicity based on diameter of necrotic area varied among different species. *A. tenuissima* had the highest frequency and *A. solani* and *A. tenuissima* had the highest degree of pathogenicity among the studied *Alternaria* isolates.

Keywords: *Alternaria* species, Pathogenicity, Potato, West Azerbaijan.

See Persian text for figures and tables (Pages ۳۲۵-۳۳۴).

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