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The Thesis Submitted for M.Sc. Degree in Plant pathology

**Identification of biotrophic fungi belonging to *Erysiphaceae* in Kohgiluyeh &
BoyerAhmad Province**

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Abstract

Plant samples with powdery mildew symptoms were collected from different localities in Kohgiluyeh and Boyer Ahmad province and nomenclatured. In order to identify the powdery mildew fungi, characteristics related to different structures, including the Casmothecium (diameter, shape and dimensions of appendages around it), Ascus (shape, dimensions) Ascospore (number per ascus, shape, dimensions), Foot-cells of conidiophore (shape, dimensions) and conidium (solitary or catenate, shape, dimensions) were examined on several microscopic slides and drawings were drawn from structures with drawing tube attached on an Olympus CH30 microscope. Based on results of this study, *Helichrysum oligocephalum* is a new host at the genus and species level for the genus *Golovinomyces* in Iran. Furthermore, there has been no report of powdery mildew on *Vicia narbonensis* in Iran. Although some fungal species have already been reported from Iran, but in present research new host plants were identified for them. *Bromus hordeaceus* for *Blumeria graminis* species complex, *Carduus pycnocephalus*, *Cirsium syriacus* and *Jurinea carduiiformis* for *Golovinomyces montagnei* *Erodium glaucophyllum* and *E. moschatum* for *Podosphaera erodii* and *Geranium pyrenaicum* for *Podosphaera fugax* are introduced as new hosts of powdery mildew fungi in Iran.

Keywords: New host, Plant diseases, Powdery mildew,