



University of Zabol
Graduate school
Faculty of Agriculture
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The Thesis Submitted for M.Sc. Degree in Plant pathology

**Identification of biotrophic fungi on herbal plants :
in Guilan and Mazandaran Provinces**

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Abstract:

This research was carried out in order to identify fungi causing powdery mildew, rust and smut on plants in Mazandaran and Gilan regions. Specimens with symptoms were collected from different localities in those regions during spring-autumn 2017-18. Fungi were directly isolated from leaf surface or raceme and studied with light microscopy. Morphological characteristics including shape, colour and dimension of fungal structures viz. Conidiophores and conidia in powdery mildews, teliospores and urdiniospores in rusts and teliospores in smuts were investigated and some photos prepared. In total, *Blumeria graminis*, *Puccinia cynodontis*, *P. malvacearum*, *P. striiformis*, *Cynanchum acutum*, *Ustilago aeluropi*, *U. cynodontis*, *U. tritici* and *Sporisorium schweinfurthianum* on various host plants belonging to *Poaceae* were identified.

Key words: Obligate parasites, Taxonomy, Morphological characteristics