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

Identification of biotrophic fungi on gramineaceous plants in Sistan region

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Abstract:

This research was carried out in order to identify fungi causing powdery mildew, rust and smut on gramineaceous plants in Sistan region. Specimens with symptoms were collected from different localities in Sistan region 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 bromina*, *P. cynodontis*, *P. graminis*, *P. striiformis*, *Sporisorium schweinfurthianum*, *Ustilago aeluropodis*, *U. cynodontis* and *U. tritici* were identified on various host plants belonging to *Poaceae*.

Key words: Obligate parasites, Taxonomy, Morphological characteristics, Gramineae