

University of Zabol Graduate school Faculty of Agriculture Departmant of Plant Protection

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

## Morphological and molecular identification of fungi causing leaf spot on tropical fruit trees in the south of the Baluchestan region.

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Tropical fruit trees are important crops in the south of the Sistan and Baluchestan province which are sometimes infected with fungal agents. This research was carried out to identify fungi inhabited on leaves of the tropical fruit trees in the south of the Baluchestan region. the Leaves with symptoms were collected several times and transferred to the laboratory. The specimen was examined by stereomicroscope and part of the specimen put on PDA media. Morphological characteristics of fungal structures including conidiophores, conidia, and conidiogenous cells were examined in microscopic slides. Nucleotide sequencing of the ITS-rDNA region was used to confirm identification. Obtained sequences were compared with similar sequences recorded in the GeneBank and analyzed using MEGA6 software. Finally, with morphological and molecular data, Alternaria alternata, Alternaria tenuissima, Canariomyces arenarius and Curvularia tuberculata were identified as causal agents of leaf spot and Aspergillus aculetus and Aspergillus sydowii were identified as endophytic fungi from the leaf of Ber, Guava, Mango and Papaya.

Keywords: Taxonomy, Fungus, Leaf spot, ITS region.