

ABSTRACT

During this investigation, several infected plants were collected from different sampling sites of Lahore i.e. Botanical Garden, University of the Punjab; Canal Road; Firdous Park; GCU Botanic Garden and Arboretum; Government College University, Lahore; Jallo Botanic Garden; Jinnah Garden; Kamahan; Raiwind Road; Race Course Park; University of Education, Township Campus and Wagah border Lahore. Presence of pathogenic fungi on these plants were confirmed initially by section cutting of infected plant parts. Those pathogenic fungi were isolated by culturing methods. A total of twenty-three fungal pathogens have been isolated, characterized, identified and discussed in this study. All of the isolated fungal taxa were identified up to species level on the basis of morphological characterization. However, some of the pathogenic fungi were also identified based on molecular analysis of ITS and LSU regions of nr-DNA. These twenty three pathogenic fungi belong to nineteen genera of sixteen families of twelve orders of three divisions. In this investigation eight pathogenic fungal taxa (*Aspergillus parasiticus*, *Alternaria triticicola*, *Curvularia australiensis*, *Macrophoma candollei*, *Medicopsis romeroi*, *Nigrospora sphaerica*, *Thielavia terrestris*) were first time reported from Pakistan. In addition, twelve pathogenic fungi have been reported on new hosts (*Aspergillus parasiticus* on *Carica papaya*, *A. tubingensis* on *Chenopodium album*, *Alternaria triticicola* on *Cydonia vulgaris*, *Cercospora beticola* on *Terminalia arjuna*, *Colletotrichum gleosporioides* on *Atrocarpus lakoocha*, *Curvularia australiensis* on *Cynodon dactylon*, *Hyaloperonospora parasitica* on *Brassica campestris*, *Macrophoma candollei* on *Albizia lebbek*, *Medicopsis romeroi* on *Ficus carica*, *Nigrospora sphaerica* on *Bauhinia variegata*, *Rhizopus microsporus* on *Lagenaria siceraria*, *Thielavia terrestris* on *Chlorophytum comosum*). Three plant species have also been found as new hosts for fungal pathogens from Pakistan (*Ficus carica* for *Aspergillus tenuissima*, *Millettia pinnata* for *Alternaria longipes*, *Xanthium strumarium* for *Podosphaera xantii*).