

Diversity of Dermatophytes and Keratinophilic Fungi from International Tourist Spots, City of Taj Mahal

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Abstract : The present investigation deals with diversity of dermatophytes and keratinophilic fungi from different tourist spots such as Agra Fort, Akbar tomb, It-Mat-Ud-Daulah, Mariam tomb, Radha Swami Bagh, and Taj Mahal of Agra City. These fungi are medically important which causes various infections and diseases in humans and animals. The main reservoir of these pathogens are the keratinous substances that increases due to birds and animal activities in the vicinity of monuments, where thousands (5413266) annual visitors from all over the world are visiting. The soil samples were subjected to isolate the pathogenic fungi through bait technique (buffalo skin, chicken feathers, human hair and goat tail hair). Baits were spread over the soil samples and incubated at room temperature for 30-35 days and pure culture isolates were maintained in SDA medium, stored at 4°C. Highest number of visitors were (3906453) from Taj Mahal, minimum 10785 at Mariam tomb annually, the total 271 isolates were encountered from soil samples out of these 18 genera and 38 species were found in different season. Highest incidence was 4.79% frequency shown by *Chrysosporium keratinophilum* while least 738% frequency occurrence by *Trichophyton simii* in soil samples. From the present study it was concluded that the incidence of pathogenic fungal isolates were the common in tourists soil that are etiological agents of superficial mycosis. Thus, both human and animal activity seemed to play an important role in occurrence and distribution of keratinophilic and related dermatophytes at various tourist places of Agra city.

Keywords : dermatophytic fungal diversity, bait technique, visitors at tourist spots, human and animal activities, soil samples

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