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DECAYING WOODY PLANT MATERIAL AN ECOLOGICAL NICHE OF PATHOGENIC OPPORTUNISTIC FUNGI ISOLATED FROM INDOOR AND OUTDOOR ENVIRONMENT OF PUBLIC PLACES AT JABALPUR, CENTRAL INDIA

NAMITA BEDI[1,2], SHESH RAO NAWANGE[3,5], NEELIMA RAIPURIA[2], ARVIND KAVISHWAR[4], VARSHA AGLAWE[6] and RANI SHUKLA[2]

[1]*Amity Institute of Biotechnology, Amity University, UP, Noida-201303*

[2]*Department of Botany and Microbiology, Govt M. H College of Homescience and Science for Women, Jabalpur (M.P) 482001.*

[3]*Center for Medical Mycology, Fungal Disease Diagnostic and Research Center, (Society for Research Diagnosis and Treatment of Human Fungal Diseases) Jabalpur, Madhya Pradesh. 1570 Wright Town Jabalpur (M.P) 482002*

[4]*Regional Medical Research Centre for Tribal, RMRCT Complex, Jabalpur (M.P)*

[5]*Medical Mycology Research Laboratory Department of Biological Science, Rani Durgavati Vishwavidyala, Jabalpur (M.P) 482001.*

[6]*Department of Zoology Government Model Science College Jabalpur (M.P) 482001*

[1]*Corresponding author*

ABSTRACT: Ecological association of human pathogenic fungi decaying woody plant materials from the indoor and outdoor environment of public places has been searched for the possible ecological niche of these opportunistic pathogens so as to determine the possible source of infection in man and animal. A total of 224 fungi belonging to 15 genera and 38 species were isolated by direct plating technique from decaying woody material. Aspergillus spp. (20.53%) was most frequent followed by Fusarium spp. (12%), Cladosporium spp.(11.6%), Curvularia spp.(11.6%), Alternaria spp. (9.37%), Penicillium spp.(4.46%), Trichoderma spp. (4.08%), Chaetomium spp.(4.08%), Paecilomyces spp.(3.57%), Rhizomucor spp.(3.l2%), Trichosporon spp.(1.33%), Rhizopus spp.(.08%) and Phialophora spp.(.08%) respectively. Afumigatus (11.62%) was most frequently isolated from outdoor of college campus from and A.niger (5.76%) from school campus respectively. Aspergillus spp. was isolated most frequently from college (20%) and school campus (18.75%) and Cladosporium spp. (19.23%) was found most prevalent from indoor environment of houses. Aureobasidium showed outdoor and indoor environment statistically significant p-0.05 and t 2.52. The occurrence of such connections in highly public places will hopefully furnish more precise clues to fungal habitats and allow the design of control programmes aimed at avoiding human and animal infections.

Key words: Ecology, Decaying wood, Biodiversity, Opportunistic fungi, indoor outdoor microflora central India.