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**Document Title** : STUDIES ON MYCOFLORA ASSOCIATED WITH SOME TEXTILES IN JEDDAH CITY

دراسات علي الفلورا الفطرية المصاحبة لبعض المنسوجات في مدينة جدة

**Document Language** : Arabic

**Abstract** : The present study is concerned on the mycoflora associated with textiles collected from market shops in Jeddah city (Kingdom of Saudi Arabia ). Fungal flora were determined and identified. Cultural and morphological characters were tested for fungi isolated from different textiles. Results showed the highest number of fungal colonies were recorded in cotton fabric samplers reached 1932 fungal colonies /cm<sup>2</sup> , polyester recorded low number of fungal population 400 fungal colonies /cm<sup>2</sup> , fungal isolates represented 12 genera and 23 species. The most frequent genera were Aspergillus and penicillium an the most frequent species were Aspergillus niger and Penicillium chrysogenum . Physiological characters were tested for ten fungal species that showed : the optimum temperature was between 25<sup>o</sup>c -30<sup>o</sup>c, the optimum pH ranged between 6 - 7 and the optimum relative humidity level was between 85% - 100% . All fungal species tested proved to produce cellulose and protease enzymes . Trichoderma viride was shown high producing rate in secreting enzymes degrading cellulose and protein . Results showed increasing in percentage inhibition for fungal growth with increasing of detergents concretions (Arial and Tide ) . Detection of biodeterioration in textiles showed color pigments which discolorate fabric samples.

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