Abstract

The fungi use the various substrates such as carbon and energy source, are one of the major causative agents biodeterioration of bibliographic materials in archives and libraries. In the Universidad del Valle, a study of fungal populations with the aim of isolating the fungi on the surface of the books and in the environment of the library. We performed a sampling of books with signs of biodeterioration of four sections (General Books Store, Antiques Books Collection, Periodical Library Collection and Periodical Library Store). A total of 409 colony-forming units (UFC) on potato dextrose agar and cellulose agar were isolated, locating (89.7%) in the environment and in the books (10.3%). The 37.16% of UFC were detected in the General Books Store, 9.78% at Periodical Library and a 34.97% at Antiques Books Collection. There were 17 genera of fungi as the most abundant, Cladosporium (59.72%), Fusarium (9.31%), Curvularia (6.62%), Aspergillus (6.37%) and Chaetomium (5.64%). All genera showed ability to grow in agar cellulose. The Kruskal-Wallis test (p=0.552) determined that there were no significant differences in the number of colonies in UFC/m2/min isolated environment for the four sections of the Library.

Keywords

Paper biodegradation, bibliographic archives, environmental fungi