



ECCO XXXIII

Molecular Taxonomy: from Biodiversity to Biotechnology



ECCO XXXIII

Molecular Taxonomy: from biodiversity to biotechnology

33rd Annual Meeting of the European Culture Collections' Organisation

Valencia from 11 to 13 June 2014

ABSTRACT BOOK

Study of the viability of *Aspergillus* strains freeze-dried in 1955

C. Soares^{1*}, C. Santos¹, M.L. Martins², N. Lima¹

¹Micoteca da Universidade do Minho, CEB-Centre of Biological Engineering, University of Minho, Braga, Portugal

²Laboratório de Micologia, Instituto de Higiene e Medicina Tropical, Lisboa, Portugal

celia.soares@ceb.uminho.pt

The Institute of Hygiene and Tropical Medicine (IHMT) entrusted to Micoteca of the University of Minho (MUM) a set of freeze-dried glass ampoules untouched for nearly 60 years. Forty-six ampoules with cultures of fifteen species of *Aspergillus* were open and its viability was tested.

The revival procedure consisted in rehydrating the ampoules using malt extract-glucose-yeast extract-peptone medium (MGYP) from 24 to 48 hours. A portion was then plated in malt extract agar (MEA) and incubated at 25 °C, as well as the rest of the material inside the ampoule. All plates and ampoules were daily observed.

Results showed that 98% of the freeze-dried cultures were not viable and the sole exception was of an ampoule with a strain of *Aspergillus fumigatus* (513.5e). With the revival of this strain, a morphological and proteomic characterization of the 60 year old culture was done and will be integrated as a new holding in MUM after complete polyphasic characterisation.