

**THE FILAMENTOUS FUNGI CULTURE COLLECTION
OF THE DEPARTMENT OF FOOD SCIENCE (CCDCA),
FEDERAL UNIVERSITY OF LAVRAS, BRAZIL**

P15

**F. R. F. Passamani¹, M. F. Terra², F. A. Couto², S. C. Bastos¹, D. R. Dias¹,
C. Santos³, N. Lima³ and L. R. Batista¹**

¹ Federal University of Lavras, Department of Food Science, Lavras, MG, Brazil

² Federal University of Lavras, Department of Biology, Lavras, MG, Brazil

³ IBB/Biological Engineering Centre, Micoteca da Universidade do Minho, Braga, Portugal

e-mail: luisrb@dca.ufla.br

Brazil has one of the highest levels of biological diversity due to its large geographical area, high coverage by rainforests, and endemic biomes, such as the Brazilian Atlantic Forest, Cerrado and Caatinga. Of the estimated 1.5 million species of fungi only 5% are known. Much of this unknown biodiversity is in the tropics, which is seriously threatened by some agricultural activities, reinforcing the urgent need for biodiversity studies in these areas. The maintenance and preservation of fungal cultures are important elements for such a requirement. The establishment of a culture collection of filamentous fungi in the Mycotoxins and Mycology Laboratory, Department of Food Science (CCDCA), Federal University of Lavras (UFLA) commenced from the bases of species maintenance, taxonomy, biotechnology and toxigenicity. The laboratory was established in 2007 to preserve potentially mycotoxigenic fungi, especially ochratoxin A and aflatoxins producers, which were isolated from food. Currently the CCDCA has more than 1000 isolates of *Aspergillus*, *Penicillium*, *Cladosporium*, *Fusarium*, *Alternaria*, *Chaetomium*, *Mucor*, *Eurotium*, and *Neosartorya*. A total of 66 species are represented which were isolated from food, cave environments, and soils of the Brazilian Atlantic Forest, Cerrado and Caatinga. A total of 328 cultures are preserved and maintained by periodic subculture, 137 by mineral oil preservation, and 550 by filter paper preservation. The staff trains graduate students in the taxonomy of major taxa of importance to agricultural research and food science. Finally, the CCDCA and UFLA, Brazil, in collaboration with the IBB-Biological Engineering Centre, Micoteca da Universidade do Minho, Portugal, intend to develop a project on polyphasic studies of *Aspergillus* and *Penicillium* isolated from various substrates, sources, and environments in Brazil. To pursue this aim CCDCA intends to: a) preserve *Aspergillus* and *Penicillium* strains for comparative studies between Brazilian regions and worldwide; b) foster the study of *Aspergillus* and *Penicillium* for biotechnological and toxigenic potential, and training in identification, preservation and distribution; c) establish quality control of fungal assays; and d) establish the CCDCA as a member of the global network of culture collections and participate in the international forums and organisations related to culture collections.

Acknowledgements:

L.R. Batista thanks CNPQ and FAPEMIG for financial support.