TAXONOMIC CHARACTERIZATION OF YEASTS ISOLATES ASSOCIATED WITH PHYLLOSPHERE OF BACCHARIS DRACUNCULIFOLIA DC (ASTERACEA)

Milhim, B. H. G. A.; Rodrigues E.P.; Gutuzzo, G.O.; Pereira, G.A.; Barcellos F.G.

Department of General Biology, Genetics of microorganisms Laboratory, State University of Londrina, Londrina, Brazil

Native plants of the Brazilian flora are a promising source for bioprospecting of microorganisms with potential biotechnological applications in different areas of interest. In this context, the medicinal plants are especially important, with potential application in antimicrobial prospecting and other active biomolecules. The Genetics of Microorganisms Laboratory at the State University of Londrina has a collection of yeasts isolates, which were isolated from phyllosphere of the medicinal plant species Baccharis dracunculifolia. To enable the bioprospecting of these microorganisms, it is necessary the taxonomic identification (genus and species) and genetic diversity characterization of them. Thus, this project aimed to the taxonomic characterization of 24 yeasts isolates from our Laboratory collection, based on ITS1-5.8S-ITS2 region of the ribosomal DNA using PCR-RFLP technique. A dendrogram was constructed with the restriction bands profiles obtained from each isolated. The obtained results showed the existence of a variety of genera and species of the yeasts isolated from the phyllosphere of Baccharis dracunculifolia, with predominance of Aureobasidium genus, more specifically the A. pullulans and A. leucospermi species. The identification (genera and species) of yeasts isolates obtained from the medicinal plant Baccharis dracunculifolia, with the predominance of the Aureobasidium genera, will provide the better bioprospection of them for enzymes and other biomolecules of industrial importance.

Acknowledgements: State University of Londrina (UEL) and CNPq, for financial support.

Key Words: biotechnological application, medicinal plants, Aureobasidium