Identification and characterization of yeasts isolated from sedimentary rocks of Union Glacier at the Antarctica

Yuivar, Yassef

Socias, Gabriel

Alcaíno, Jennifer

Cifuentes, Víctor

Baeza, Marcelo

© 2016, Springer Japan. The study of the yeasts that inhabit cold environments, such as Antarctica, is an active field of investigation oriented toward understanding their ecological roles in these ecosystems. In a great part, the interest in cold-adapted yeasts is due to several industrial and biotechnological applications that have been described for them. The aim of this work was to isolate and identify yeasts from sedimentary rock samples collected at the Union Glacier, Antarctica. Furthermore, the yeasts were physiologically characterized, including the production of metabolites of biotechnological interest. The yeasts isolated that were identified at the molecular level belonged to genera Collophora (1 isolate), Cryptococcus (2 isolates), Sporidiobolus (4 isolates), Sporobolomyces (1 isolate) and Torrubiella (2 isolates). The majority of yeasts were basidiomycetous and psychrotolerant. By cross-test assays for anti-yeast activity, it was determined that Collophora sp., Sporidiobo