LONGDOM Scientific Tracks

Fermenter yeast identified from *Ensete ventricosum* product: Kocho and Bulla collected from Angacha district, Ethiopia

Birhanu Gizaw, Zerihun Tsegay, Genene Tefera, Befikadu Teshome and Belay Tilahun Ethiopian Biodiversity Institute, Ethiopia

Cocho and Bula are the fermented product of KEnset (Ensete ventricosum). It is the staple food for 20 million people in Ethiopia. The aim of the study was to isolate, identify and characterize yeast species from fermented Kocho and Bulla by using Biolog Micro station. Three hundred Kocho samples were collected from Angacha District. Serially diluted samples of 0.1ml were streaked on yeast peptone dextrose agar and incubated at 28°C. Pure yeast colony inoculum was prepared at 9ml distilled water at 49% +2 turbidometer and transferred into YT microplate. Incubated for 24-72hrs at 28°C and microplate reading were carried out using MicroLog 3 Software version 4.20.05. Seventeen yeast species were read by Micro station. Biolog Micro station 100% probability and ≥0.5 similarities read identity was Cryptococcus albidus var. aerus, Guilliermondella selenospora, Rhodotorula acheniorum and Trichosporon beigelii, 99% Cryptococcus terreus A, 98% Candida zylandase, 86% Kluyveramyces delphensis respectively, and \leq 75% probablity, \leq 0.5 similarity index recorded Filobasidilla neoformans, Hyphopichia burtoni, Galactomyces geotrichum, Hanseniaspora valbyensis Kloecker, Candida albidus var. albidus, Sporobolomyces roseus and Debaryomes hanseni var. hanesenii. Characterization of yeast involved in Kocho fermentation is very important for the formulation of starter culture, improving, standardizing and modernizing quality of traditional Enset fermentation and preparation.

Biography: Birhanu Gizaw is an Associate Researcher

II in Ethiopian Biodiversity Institute under the Microbiology department. He has 7 years of microbial diversity study and research experience and published about 20 research articles on microbial diversity in different agro-ecology. He graduated from Addis Ababa University holding M.Sc. degree in applied Microbiology at 2010, Koteb University College, Bahir Dar University, diploma and bachelor's degree in Biological Science respectively. He is currently working in Ethiopian Biodiversity Institute as Bacteria-Fungus research team leader and engaged in isolation, identification and characterizing fungus and bacteria species diversity throughout the county.

gizachewbirhan@gmail.com