

unique unicc

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UNiCC in Universiti Putra Malaysia was established to be the main “umbrella” for culture collection for Malaysian research and teaching, focusing on microbes isolated from food, agriculture and the environment. UNiCC promotes international standard of operation in a culture collection in order to fulfill the demands of reliable biological material, authentication and increasing the awareness of conserving microbial biodiversity.

A culture collection must decide what groups of microorganism to be maintained and clearly define their accession policy. For UNiCC, we only receive depository of hazard level 1 and 2 microorganisms. The exercise is labour-intensive and the staff are trained from time to time with culture collection curation skills to make sure that the culture collection management system runs efficiently. The system includes accessions, preservation, maintenance, viability checking, microorganism supply and documentations. Depositors must fill in the accession form that includes information on the strains (hazard level, name of species, source and origin of the strain, isolation and identification history, special features and properties, and bibliographic references). Preservation methods are important to ensure optimal viability, storage, purity and stability of individual strains. Each microorganism strain should be maintained by at least two different procedures. UNiCC maintains the cultures by freeze-drying (lyophilization) and -80°C freezers (cryopreservation). All the documentations and records of the operation of UNiCC are kept systematically. The establishment of UNiCC is done according to the World Federation for Culture Collection Guidelines for the Establishment and Operation of Collections of Culture of Microorganisms (WFCC, 2010).

