

**MULTI-STAGE FERMENTATION FOR IMPROVED PRESERVATION OF
MICROBIAL CONSORTIA: *The IMO Labs. Experience***

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ABSTRACT

The application of Interactive Micro-Organisms Laboratories (IMO Labs.) multi-stage liquid-solid fermentation techniques facilitates the prolonged maintenance of viability and efficacy of lactic acid bacteria-yeast consortia.

Natural selection and acclimatization of different lactic acid bacteria and yeast strains is accomplished through these techniques by a stage by stage exposure to natural complex substrates which simulate their macrobiotic environment. Organic based protectants are also integrated to buffer the microorganisms against the harsher conditions found in this mixed ecosystem, thus allowing the co-existence of a multicultural consortia.

Studies are currently being conducted using at the Interactive Micro-Organisms Culture Collection (IMOCC) to standardize protocols for the screening, isolation, characterization and maintenance (short, medium and long-term) of microbial consortia of environmental, food, aquaculture and agricultural importance. Both conventional and molecular techniques are being used to develop a comprehensive profile of IMOCC's existing consortia resources. IMOCC is a member of the IMO Labs. group of companies.

Further information on some product lines successfully developed by IMO Labs. using these techniques may be found on the following web sites: <http://www.vantaron.com/primos25.htm> and <http://bionovar.com/bionovar/Technology.htm>

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