

P104

Screening and Isolation of Halophilic Microorganisms from Jeotgal -the Traditional Fermented Seafood

Kyung-Hwa Choi, Kyung-Ju Hwang, Ki-Won Choi and Jaeho Cha

Department of Microbiology, College of Natural Sciences, Pusan National University,
Busan 609-735

Jeotgal, the traditional fermented seafood, has been used as an important additive for improving the taste of other foods as well as being food itself. Studies on the microorganism found during jeotgal fermentation process have shown that halophilic and/or salt-tolerant microorganisms play an important role in fermentation of jeotgal. We isolated microorganisms from three types of jeotgal (shrimp, anchovy, yellow corvenia). The jeotgal samples were diluted with sterilized seawater and cultured on Marine (Difco) and R2A (Difco) media at 30°C. The salt concentration of each media was adjusted to 5%, 10%, 15%, and 20%, respectively. Total 108, 46, and 34 isolates were obtained from shrimp, anchovy, and yellow corvenia jeotgal, respectively. Among total 188 isolates, the pigmented, exopolysaccharide-producing, and highly halophilic isolates were found. The isolates were classified by the morphological differences (color, colony shape, and colony margin), salt-tolerance, and growth-rate. Interestingly, a few isolates exhibited different morphology on two different media. For the identification and distribution of microorganisms in jeotgal the examination of Gram staining, biochemical characterization, and 16s rRNA gene sequencing are under progress.