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Isolation and characterization of Probiotic from Fermented Rice, Idly and Dosa batter and screening of antimicrobial activity

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Abstract : The functional foods have become a part of an every diet and are demonstrated to offer potential health benefits which is widely nutritional effects, the most important and frequently used functional foods compound are probiotics and prebiotic. Probiotics dairy foods, Fermented rice and some homemade ingredient like Dosa batter, idly batter beneficially affect the host by improving survival and implantation of live microbial supplement by selectively stimulate growth and activating the catabolism of health promoting bacteria. These are some special kind of bacteria they are healthy for the host organisms. These bacteria commonly found in food and dietary product.. In our study, probiotics were isolated from fermented rice, idly batter and dosa batter. Total isolated strains were studied for their characterization, and also strains were studied antibacterial also their antibiotic susceptibility quality. The antibiotic resistance of potential strain was studied using Vancomycin, gentamycin, chloromphenicol, ciprofloxacin and cefataximide. PB1, PB3 shows the good resistance activity to the antibiotics. Specially this study is for isolating, identifying, and characterizing the probiotics .Isolated strains were identified by Gram staining, catalase assay, and 3 molecular identification methods; namely, (GTG) 5-PCR fingerprinting, This experiments shows the better anti-pathogen activity, and acceptable antibiotic susceptibility; it implies we can use these probiotics in different purpose in food industry for modern food synthesis, for antimicrobial susceptibility test we are taking amplicin, karamycin, tetracycline, tripsin by using of the antibiotics concluded that various inhibition zones of given sample of probiotics.

Keywords : probiotics, fermented rice, idly and Dosa batter, biochemical characterization, antimicrobial activity.

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