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Evaluation of some probiotic properties of yeasts isolated from Turkish cheeses

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The possible beneficial properties of dairy foods and associated microorganisms for both human and animal health are increasingly investigated. In this study, *three Pichia kudriavzeii* (M16, M17 and M57) and one *Kluyveromyces marxianus* (M29) strains isolated from Turkish cheeses were evaluated for some functional properties relevant to their use as probiotic. All strains were able to grow under low acid condition (pH 3) and survived well (61.4-100%) in the presence of conjugated bile salts (0.3%) after 48 h of incubation, while producing exopolysaccharide (EPS) ranging between 55.3-130.7 mg/L. All yeast strains presented high auto-aggregation ability in the range of 70.6-88.7%. All strains also showed higher hydrophobic activities in acidic chloroform and toluene solvents compared with the neutral p-xylene solvent and basic ethyl acetate solvent. Only *P.*

kudriavzeii M57 showed inhibitory activities on *Bacillus cereus* RSKK 863 (11.7 mm) and *Pseudomonas aeruginosa* ATCC 27853 (11.9 mm). In conclusion, the presented results indicate that both *Pichia kudriavzeii* and *Kluyveromyces marxianus* strains isolated from cheeses could be regarded as appropriate candidate for new probiotic yeast strains, they could be used as adjunct cultures for contributing to the quality and health related functional properties of dairy products.

Speaker Biography

Abudureyimu Maiheubai has recently completed her PhD from Gazi University and preparing for her Post-doctoral Program in Abroad. During her graduate studies, she has published 6 papers in reputed journals and has attended many international Congress.

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