Anju Dhiman, J Microb Biochem Technol 2016, 8:5(Suppl)
http://dx.doi.org/10.4172/1948-5948.C1.022

Seclusion and depiction of microorganisms responsible for spoilage of fruits and vegetables

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Fruits and vegetables are the main dietary source of nutrients, micronutrients, vitamins and fiber for human, which are consumed widely. However, they are contaminated with diverse range of bacterias and their spores through reproductive cells. Fruits and vegans samples were collected from four different places viz. Bhalout (Rohtak, India), Chandpur (Jind, India), Chang (Bhiwani) and Ganaur (Sonipat). Test samples were processed to identify total viable cells (cfu/ml). The highest total viable count was found in tomato followed by lemon. *Bacillus, Micrococcus, Staphylococcus, Klebsiella, Escherichia coli, Pseudomonas* and Enterobacter species were isolated and identified on the basis of morphology (Gram staining and cell morphology), biochemical tests (indole production test, methyl-red test, Voges-Proskauer test and citrate utilization test) and growth on selective cum differential culture media (such as MacConkey agar and mannitol salt agar media). It was found that *Bacillus, Klebsiella, E. coli, E. aerogenes* and *Pseudomonas* were dominating species in the spoilage of every category of fruits and vegan samples. The bacteria particularly Gram negative, was key responsible for food spoilage. Proper handling of fruits and vegetables, hygiene transportation and appropriate storage is necessary to avoid microbial food spoilage and related health risks.

Biography

Anju Dhiman has completed her PhD from Maharshi Dayanand University and presently serving as an Assistant Professor since 2006. She has published more than 35 papers in reputed journals and serving as an Editorial Board Member of reputed pharmacy journals.

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