

Food Processing & Technology

October 27-29, 2016 Rome, Italy

Bio-processing of tomato (*Lycopersicon esculentum*) into value-added product

W A J P Wijesinghe¹, T M A N Weerasinghe¹, M P M Arachchi¹ and K H Sarananda²¹Uva Wellassa University, Sri Lanka²Food Research Unit, Sri Lanka

Tomato (*Lycopersicon esculentum*) is a highly perishable fresh commodity with high postharvest loss. Value addition is one of the solutions in order to minimize the post harvest loss of fresh commodities. In this study, a tomato topping was developed using dehydrated tomato. Just ripen stage of tomato variety 'Pathma' was selected for the study. Selected tomato samples were treated with concentration series of salt and assigned for the pre-dehydration processes. Treatments were arranged into a Complete Randomized Design (CRD). Dehydrated tomato samples were evaluated for microbial counts, moisture content and physical appearances to select the best dehydrated tomato sample. Selected best tomato sample was used to develop tomato topping. Three recipes were evaluated using sensory analysis and the tomato topping with brix value of 25 was selected as the most preferable sample with highest overall acceptability. Selected sample was checked for physicochemical properties, microbial counts and proximate composition. The product was checked for the organoleptic properties for a period of three weeks using a sensory evaluation test. During 21 days of storage at 4°C, microbial counts, acidity and pH were within the standards specified by the Sri Lankan Standard Institute and the organoleptic qualities were not deteriorated within the storage period. Therefore, the developed product could be stored safely for 21 days at refrigerated temperature (4°C). The Dehydrated tomato topping with brix value of 25 could be recommended as a fat free vegetarian product for future needs.

Biography

W A J P Wijesinghe is working as a Senior Lecturer at Uva Wellassa University. At present, she teaches several subjects including principles of food science, agro-food process technology, postharvest technology, food and biochemical engineering, advanced food science, grain product technology and value addition and new product development. He completed his PhD in Jeju National University, South Korea. He has obtained MSc at Post Graduate Institute of Science, University of Peradeniya, Sri Lanka in the field of Postharvest Technology of Fruits and Vegetables. His basic degree is Food Science and Technology from the Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka.

jnkwiwesinghe@yahoo.com

Notes: