Enhancement of Tomato (*Solanum Lycopersicum L.)* Shelf Life through Packaging

Mafuta J.N [1*],Shibairo S. I, &Wafula J.N
[1]Kibabii University, Department of Agriculture and Veterinary Sciences Department,
P. O. Box 1699-50200,Bungoma-Kenya.
Corresponding email: jenephernangila@ymail.com

Citation: KIBU International Conference (2018). Creativity and Innovation for Sustainable Development. Book of Abstracts of Kibabii University 3rd International Conference 12 - 14 June 2018. Kibabii University Main campus, Bungoma Kenya ISBN: 978-9966-59-011-5

Abstract

Tomato (*Solanum lycopersicum L)* production has increased in recent years due to its economic and nutritional importance. Postharvest issues, however, continue to limit tomato wide usage. The good harvests of tomato do not translate into profit as most are lost after harvest. A study was conducted to determine suitable packaging material that can extend the shelf life of the tomato. Five treatments (Nylon net, Craft paper, Nylon cotton paper, Sack net and Open (control) arranged in completely randomized design (CRD) replicated four times were used. Data were collected on weight change, rate of decay, colour change, total soluble solids and pH. The results indicated significant differences due to packaging material on weight change where the craft paper showed the lowest weight change percentage at the end of storage period as compared to all other treatments, total soluble solids where the craft paper had the lowest TSS content due to delayed ripening as compared to other materials and pH where the craft paper had the lowest amount of titratable acidity from the 7th day. It is concluded that craft paper enhanced longer shelf compared to other materials hence the best packaging material for tomatoes. Craft paper is therefore recommended for tomato producers and consumers as a packaging material.

Key words: Tomato, packaging-material and shelf-life