

Analysis of Characteristics of Tomato Preferred by Main Supply Chain Actors

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Abstract

Tomato is the most popular and important fruit vegetable in the world. However, post-harvest losses (PHLs) of Tomato are high due to many reasons. Supply and demand inconsistency due to poor information flow on the preferences is one of the major reasons for PHL. Preferences on morphological characters can be differed among main supply chain actors along the Tomato supply chain. Therefore, this study was conducted to identify the preferences on different selected morphological characters of Tomato by farmers, wholesalers, retailers and consumers to provide suggestions for an efficient Tomato supply chain which would minimize the PHLs. Selected morphological characters were fruit shape, fruit color, and firmness of the fruit, shelf-life of fruit, fruit weight, fruit length, fruit diameter, pericarp thickness and growth habit of plant. This research survey study was carried out using pre-tested questionnaire with a catalogue. The total sample size was 80 respondents including 20 farmers in Welimada area, 10 wholesalers in Dambulla economic center, 20 retailers and 30 consumers in Gampaha district. Farmers and wholesalers were selected purposively and the rest were selected by using convenient sampling method. Collected data were analyzed using descriptive and inferential data analyzing tools. Friedman test and Wilcoxon sign rank test were used as main inferential statistical tools. Interestingly, the findings of the study revealed that there are some similarities and differences in preferences of main supply chain actors on selected morphological characters. Fruit color, firmness, and fruit weight were the key considering characters when purchasing tomato by wholesalers, retailers, and consumers. Moreover, fruit shape is shared considering the character of wholesalers and consumers while shelf- life is shared considering the character of retailers and consumers. However, fruit length, diameter, and pericarp thickness are important only for the retailers. Furthermore, the present study revealed that there are some differences between farmer driven and consumer driven Tomato markets. Therefore, this study suggests to introduce a new Tomato variety that fulfills the preferences of the consumers mainly to reduce the PHLs due to mismatch in the line which leads farmers to get better income. In fact, other stakeholders in Tomato supply chain should aware of the preferences of consumers in order to supply accordingly. This study provides significant insights for the marketers, policy makers and researchers in particular.

Keywords: Morphological characteristics, Preferences, Supply chain actors

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