

Assessment of post harvest losses and quality deteriorations of banana fruits during supply chain activities in Sri Lanka

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Banana is the most cultivated and consumed fruit crop in Sri Lanka. Due to its perishability and improper postharvest handling practices, postharvest losses of banana during the supply chain activities is very high. Therefore, the research was conducted to assess the postharvest losses of banana at different handling stages and to identify the causes for these losses. This will immensely benefit the postharvest industry in minimizing the postharvest loss as well as preserving the fruit quality.

The study was conducted from Embilipitiya to Colombo which is the main banana supply chain in Sri Lanka. Quantitative losses and quality deterioration of banana fruits at farmer, transporter/whole seller, retailer and consumer stages were studied. The total mechanical damages of banana were 21.82%. Physiological weight loss during the postproduction time was 9.34 %. Overall visual quality from farmer to consumer changed from excellent to poor which limits the usability. Fruit firmness significantly declined by 61.88 N in the supply chain. Use of improper packaging techniques was identified as the main cause of postharvest loss of banana.