Abstract

The work reported in this paper is part of a new research initiative recently started at Sultan Qaboos University to enhance the postharvest quality and profitability of horticultural and agricultural products in Oman through the development and application of appropriate postharvest technology. In this initial and preliminary study, we investigated the incidence of postharvest losses and wastage at the supermarket retail level in the Muscat Municipality using a combination of structured questionnaires, written comments provided by fresh produce managers, and laboratory examination of samples of waste produce. Our results showed that bruising is the most prevalent source of physical damage and wastage at the retail link in the postharvest handling chain. Estimates of average total waste ranged from 3 to 19% across supermarkets; while the amount of loss directly associated with handling damage (including bruising) was approximately 2%. All fresh produce managers consistently identified tomato and banana as the two most important contributors to total wastage, with significant contributions also from grapes and lettuce. In a typical fresh food section of a retail supermarket store with annual turnover of RO 1.152 million (1 Rial Omani=US$ 2.58), losses associated with handling damage alone exceeded RO 23 000 per annum. Given this magnitude of losses and wastage and the total annual trade (import and export) of over RO 45.57 million in fresh fruit and vegetables, wastage can exceed RO 5.47 million, with over RO 1.0 million worth of commodities affected by handling damage.