Title Fresh-cut produce: improving postharvest critical points to meet consumer expectations

Author Silvana Nicola, Emanuela Fontana, Jeanet Hoeberechts, and Cristina Torassa

Citation Abstracts of 27th International Horticultural Congress & Exhibition (IHC 2006), August 13-

19, 2006, COEX (Convention & Exhibition), Seoul, Korea. 494 pages.

Keywords shelf-life; ready-to-eat; cold chain; packaging; fresh-cut chain

Abstract

Fresh-cut produce industry has recently increased in many European and Asian countries, and it is still rising in the USA. In Europe, the countries traditionally leading the market are UK and France, with Italy that has experienced a steeping growth during the last five years, forecasting the catch of the French figures in the near future. Italian consumer approach towards fresh-cut products changes according to their culture and need fulfillments. While most consumers rely on fresh-cut produce for its convenience, some would prefer quality and safety as a priority and some others would prefer a longer shelf-life. Meeting all the expectations implies to satisfy the needs for an extended shelf-life, but also shelf-quality, for safety, organoleptic values and convenience. Italian consumers prefer fresh-cut salad mixes of many different leafy vegetables which are very delicate and susceptible to postharvest process manipulations. Maintaining quality and assuring safety of the products are challenging since most of the processing industries are located in the North of the country, while the cultivation areas are spread out at different latitudes or abroad. After harvest, vegetables used for fresh-cut market undergo a series of operations to reach the final ready-to-eat product. Thus, controls and innovation technology implementations must be pursued to optimize the whole processing procedures throughout the chain. The major fresh-cut chain critical issues to be tackled are cold chain maintenance and the great variability of vegetables for fresh-cut produce. Critical stages to be improved include early cold chain implementation, starting from harvesting up to the retailer store, storing and shipping conditions prior to reach the processing-house, logistics and processing inputs. Even if needs are different between consumers and fresh-cut sector players, meeting the consumer quality expectations by improving fresh-cut chain is the pressing goal.