

Postharvest horticulture education and training opportunities in the Asia-Pacific region

D.E. Aldous

Acta Horticulturae 1011: 25-33. 2013.

Abstract

Since the mid to late 1980s there has been a decline, for a range of reasons, in undergraduate student numbers and programmes that target postharvest horticulture and horticultural science. Postharvest horticulture has often been relegated as an elective or minor status within these undergraduate programs offered in science and/or biotechnology. Much of the postharvest horticulture teaching and research in the Asia-Pacific region is taken at the postgraduate level (M.Sc. and Ph.D. levels) both of which have demonstrated steady increases in student numbers and research projects. The objective of this paper is to investigate the current status of postharvest horticulture education and training programs associated with the universities and vocational training colleges in the Asia-Pacific region. Methodology involved a 14 question electronic survey emailed to the major universities in the Asia-Pacific region that targeted postharvest horticulture units offered in their curriculum. Results showed that approximately one-third of the universities in the Asia-Pacific region, who participated in the survey, offered postharvest horticulture as a unit or major within their undergraduate or postgraduate degree program. Less than 6% of institutions offer postharvest horticulture at the vocational level. Most undergraduate degree programs, were of 3-4 years in duration and included a 6-12 week period of industry experience. No training program or industry placement was required for seeking admission in a postgraduate qualification. Results indicated that the standards for postgraduate training in postharvest horticulture have been maintained through rigorous entry requirements with funding often coming from scholarship sources. High numbers of undergraduate students come directly from high school whereas graduate entrants principally came from government, industry researchers or as graduates from established undergraduate programs. Successful postgraduates principally found employment in teaching and research organisations and middle-senior management industry positions. The general consensus was that there were insufficient

graduates entering the market to replace those that were retiring. The major challenges for education and training in postharvest horticulture, at the undergraduate level, is to make strategic curriculum changes in postharvest subjects, and in the case of vocational education providers, improve operational skills training in postharvest horticulture. At the postgraduate level there was a need to provide stronger incentives that emphasised the systems approach in the supply chain system, and provide for diversification of postharvest horticulture into non-postharvest horticulture outcomes in order to ensure longer term sustainability.