

F 227

Designing a self - guided study -pack on post harvest technology of fruits and vegetables to advanced level biology students

Postharvest technology of fruits and vegetables (PTFV), is aimed at maintaining quality and increasing shelf-life of commodity. The principles are based on subject matter in the Advanced Level biology course; Biochemistry, Physiology, Microbiology Anatomy and Applied Biology.

A study -pack was thought to be effective in introducing PTFV. Such a pack would have several immediate advantages; acquire skills to follow written instructions, understand concepts learnt in class-room by their applications, understand importance of theoretical knowledge. Educating the future consumer and stimulating ideas on future employment opportunities were also considered. The study-pack included a students' guide, photo-album, booklet, an audio cassette and posters (3). The photos were on common diseases and handling practices of fruits/vegetables. The students' guide outlined basic concepts of PHT in 12 lessons followed by short questions and answers. Our day to day experience and technology used in developed countries were considered when preparing the lessons, activities and practicals. They were related to A/L knowledge and could be carried out with inexpensive materials without technical help. The booklet contained information on standard handling practices of local produce and some useful addresses to get further information on specialized areas. The audio-cassette explained information on posters followed by quizzes.

The pack was tested on a sample (n=10) of year thirteen students. The same test consisting of 37 questions (relevant to the A/L syllabus) was given before and after following the study pack. Performance improved significantly ($p < 0.0001$) after following the study-pack. 95% confident interval for the difference of marks was 19 and 10.8.