#### INTRODUCTION

Tropical fruits and vegetables are products with excellent market prospects in the world. In spite of the considerably rich collection of varieties of fruits, and vegetables, Sri Lanka has not exploited the potential economic benefits that the fresh produce can attract from the world market. The fruits and vegetable production is often in excess of the local demand and the surplus could be meaningfully utilized by careful postharvest management of the produce. Surveys have revealed that a substantial portion of the harvest is wasted in Sri Lanka annually due to improper harvesting and postharvest practices, diseases and lack of facilities and technology to extend their storage life. This continues to cause heavy losses in revenue to the grower, wholesaler, retailers and exporter and inconvenience to the consumer and ultimately lowers export potential of these commodities.

The reduction of losses, maintenance of quality and freshness of harvested produce prior to consumption and sending to distant markets need special technology that ensures the consumer receives a good quality product and value for money. The postharvest handling of fresh produce presents many technical problems, most of them deriving from the inherent attributes of the commodity. The functional characteristics of these commodities, their capacity to withstand the stresses of time, temperature and physical handling, to resist infection and spoilage and maintain quality constitute the basis for successful storage, handling and distribution practices.



Technical knowledge needed for successful postharvest handling of tropical perishable produce spans many disciplines biochemistry, physiology, pathology, entomology, molecular biology along with marketing and logistics management. This M.Sc. programme, designed within this multidisciplinary framework, is intended to impart scientific knowledge and technology of postharvest management of fruits and vegetables for those engaged or seeks employment in fruit and vegetable industry.





#### **OBJECTIVES**

To provide;

- Knowledge on the scientific basis and technological background on postharvest handling and management to ensure reduction of losses, preservation and processing of fresh fruits and vegetables for both local and export market,
- exposure to current trends and developments in marketing systems, quality and safety standards, packaging and value addition, requirements and limitations in the overseas market,
- scientific understanding on the nature of fresh produce and the cause of deterioration and spoilage due to senescence, pest and disease and implementation of rapid, appropriate and economical measures to rectify them.

#### **COURSE FEES**

	Course Type		
	M.Sc. by course work (SLQF 9)	M.Sc. by research (SLQF 10)	
Local candidates	Rs. 320,000	Rs. 470,000	
Foreign Candidates	Rs. 640,000	Rs. 940,000	



#### **APPLICATION PROCEDURE**

Application forms can be obtained from

The PGIS website : <u>www.pgis.pdn.ac.lk</u> Application deadline : As indicated in the website

Course Code	Course Title	Lecture hrs.	Practical/ Field hrs.	No. of Credits		
First Year - Semester I						
PL 501	Economical and social aspects of fruits and vegetables	20	20	2		
PL 502	Pre-and postharvest physiology/biochemistry of fresh produce and ethylene in postharvest Technology	15	30	2		
PL 503	Postharvest losses of fruits and vegetables	20	20	2		
PL 504	Biostatistics*	20	20	2		
PL 505	Postharvest handling and quality assurance of perishables	15	30	2		
PL 516	Postharvest diseases and disorders and their control	15	30	2		
PL 518	Insect pests in postharvest products and their control	25	10	2		
First Year - Semester II						
PL 506	Packaging and packing house operations	15	30	2		
PL 507	Transportation and storage of fruits and vegetables	15	30	2		
PL 519	Fruit and vegetable processing	15	30	2		
PL 521#	Microflora & mycotoxins in fresh & processed produce	20	20	2		
PL 522#	Marketing management for postharvest operations	25	10	2		
PL 525	Supply chain and Logistics Management	40	10	3		
PL 526 <sup>#</sup>	Biotechnology for postharvest quality management of fresh horticultural produce	25	10	2		
PHT 599	Independent Study**	500 notional hrs.		5		
Second Year						
PL 699	Research Project	3000 n	otional hrs.	30		

\*-Not considered for GPA, but a minimum of a C grade is required. \*\*-Participating at the Scientific Writing Workshop conducted by the PGIS is compulsory

# - Optional courses

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#### **Further Information**

**Programme coordinators** 

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### M.Sc. in Postharvest Technology of

## **Fruits and Vegetables**

#### Conducted by,

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