

<b>Semester:</b>	07		
<b>Course Code:</b>	ZOOL 41832		
<b>Course Name:</b>	Agricultural Entomology		
<b>Credit Value:</b>	02		
<b>Status:</b>	Compulsory		
<b>Pre-requisites:</b>	ZOOL 41703 & ZOOL 41711		
<b>Co-requisite:</b>	None		
<b>Hourly Breakdown:</b>	Theory	Practical	Independent Learning
	20	30	50

**Course Aim/Intended Learning Outcomes:**

After completion of this course unit, the student will be able to:

1. describe the concepts in insect pest management,
2. explain pest outbreaks and causes,
3. describe life history stages and damage symptoms of insect and mite pests of selected agricultural crops and stored food products in Sri Lanka,
4. recommend appropriate control and management practices of insect or mite pests of a given crop and stored food product, and
5. demonstrate practical skills to identify life history stages and damage symptoms of insect and mite pests of selected agricultural crops, and stored food/products in Sri Lanka.

**Course Content:**

Concepts in insect pest management. Pest outbreaks. Pest monitoring, surveillance, and forecasting. Pest status and categories of pests. Pest management; definition, concepts, need, objectives, requirements, components. Pest management practices: indigenous, cultural, mechanical, physical, biological, chemical, behavioural, legislative, genetical and integrated pest management practices. Host plant resistance to insects.

Insect and mite pests of selected agricultural and plantation crops such as rice, coconut, tea, sugarcane, vegetables and fruits in Sri Lanka: Identification, life histories, damage symptom, nature of damage, and management.

Insect pests of stored food products: Identification and life histories of insect pests of paddy, rice, flour and legumes, preventive measures and management. Insecticides and insecticide application equipment.

Laboratory and field practical sessions on identification of insect and mite pests, symptoms of damages caused by phytophagous insects. Life histories and symptoms of damages caused by insect and mite pests of rice, coconut, tea, sugarcane, selected fruit and vegetables and stored products. Types of insecticides and application utensils and equipment.

**Teaching /Learning Methods:**

A combination of lectures, laboratory and field sessions, assignments, self-studies, computer assisted learning, and group discussions.

**Assessment Strategy:**

Continuous assessments and end of semester examination. Percentage given for each sub-component indicates the percent contribution to the final marks.

Continuous Assessment 40 %	Final Assessment 60 %		
<b>Details:</b> Assignments 20 % Laboratory and field reports 20 %	Theory 40 %	Practical 20 %	Other -
<b>Recommended Readings:</b> <ol style="list-style-type: none"> <li>1. Van Emden H.F. (2013) Handbook of Agricultural Entomology. Wiley-Blackwell</li> <li>2. Hill, D.S. (2009). Agricultural insect pests of the tropics and their control. 2<sup>nd</sup> edition Cambridge University Press, Cambridge.</li> <li>3. Pedigo L.P. &amp; M. Rice (2006). Entomology and Pest Management Pearson, NJ, USA.</li> <li>4. Rechcigl E and N.A. Rechcigl (2015). Insect Pest Management. Techniques for Environmental Protection. Lewis Publishers</li> <li>5. Dent D. (2020). Insect Pest Management. 3<sup>rd</sup> Edition. CABI Publishers</li> <li>6. Recently published scholarly articles on agricultural entomology.</li> </ol>			