

Agricultural Entomology

Obligatory module or Selective module	Agricultural Entomology	PNH 2105
Semester	III	
Module level	Undergraduate	
Module Coordinator	Nugroho Susetya Putra	
Lecturer(s)	Nugroho Susetya Putra Suputa	
Type of Module	110 minutes lecture Practical	
Status	C (Compulsory courses)	
Exam	Written	
Number of participants	64	
Credit Points:	2/1 (5.02 ECTS)	
Description:	Insects are one of the groups of animals that are important components of the ecosystem, through their roles as herbivores, carnivores, pollinators, decomposers, other animal feeds, and other important roles. Therefore, the discussion in this lecture discusses aspects of biology (taxonomy, anatomy, physiology, behavior), taxonomy, ecology, socioecology, and insect economics. In addition, this lecture also discusses the effects (positive and negative) of insects on humans and nature.	
Academic goal (competency):	<ul style="list-style-type: none"> a. Students can understand the role and function of insects in nature, and their economic value for humans. b. Students understand the aspects of morphology, anatomy, physiology and behavior of insects. c. Students can understand insect classification techniques (classification and taxonomy) d. Students can understand the ecological and economic aspects of insects for the benefit of humans and the environment. e. Students can understand strategies for managing and utilizing insects for the benefit of humans and the environment. 	
<p>Course outcomes:</p> <p>CO1= Students are able to explain the role and function of insects in nature, as well as their economic value for human interests.</p> <p>CO2= Students are able to explain the basic biological aspects of insects, including morphology, anatomy, physiology, behavior, and ecology.</p> <p>CO3 = Students are able to explain insect classification techniques based on morphology, anatomy, function / role, and economic value of insects.</p>		

Contents:

- Introduction: the role and function of insects in nature.
- Morphology of the body.
- Anatomy of the body
- Physiology of insects.
- Growth, development, and reproduction of insects.
- Insect taxonomy and classification
- Behavior of insects and interactions with their environment.
- Effect of abiotic factors on insects
- Insects: feed / host, natural enemies, and competitors.

Which previous course required? Plant Protection

Literature:

- a. Gullan, P.J. & P.S. Cranston. 2005. The insects. An outline of entomology. Blackwell Publishing, Massachussets.
- b. Speight, M.R., M.D. Hunter, & A.D. Watt. 2008. Ecology of insects. Concepts and applications. Wiley-Blackwell, Chicester.
- c. Jurnal dan sumber-sumber lain yang terkait.

Materials provided: PPT dan hand out

Requirements for exam: 75% attendance set by the Faculty of Agriculture

Teaching method(s)

Classes
Special assignment related to the subject matters

Workload (hrs).

1. Theoretical of course: 14 times
2. Lab work: 7 times
3. Home studies: related to the chapter discussed in the class