Acarology

Obligatory module or Selective module	**Acarology**	**PNH 4238**
Semester	Odd Semester	
Module level	Undergraduate	
Module Coordinator	Dr. Ir. Nugroho Susetya Putra, M.Si	
Lecturer(s)	Dr. Ir. Nugroho Susetya Putra, M.Si Dr. Ir. Arman Wijonarko, M.Sc.	
Type of Module	1 hour 40 minutes lecture Laboratory work	
Status	E (elective courses)	
Exam	Written	
Number of participants		
Credit Points:	2/1 (5.02 ECTS)	
Description	This course explains and provides students with understanding of the biological and ecological aspects of Acari, especially in relation to agricultural ecosystems (agroecosystems) to manage their populations. Discussion of aspects of biology includes morphology, anatomy, and taxonomy of Acari. Meanwhile, the ecological aspect discusses the relationship of Acari with the abiotic environment, and biotic components, namely host plants and natural enemies. The course material is given using face-to-face and discussion methods, with the lecturer acting as the facilitator as well as the coordinator of the discussion. Practicum is carried out in the laboratory and field. Assessments to students are carried out using exams at the middle and end of the semester, coupled with assignments of lectures and practical work. The final assignment of the practicum is to make a preparation of the Acari which is intended to provide a real picture about them, because students must look for it in nature, study bioecology, then identify the species found.	
Academic goal (competency)	Provide an explanation and understanding to students about the importance of Acari in nature, and especially in the agroecosystem. Thus, students understand strategies to manage their population in nature.	

Learning outcomes:

After attending this course students are expected to:

a. Using observation techniques of the general morphology of the body of Acari which is appropriate for the purposes of species identification.

b. Motivated to observe and examine the bioecology of Acari in the laboratory and in nature.

c. Designing an Acari control strategy based on the results of studies in the laboratory and in nature.	
Contents: The course begins with an explanation of Acari including morphological, anatomical, and bioecological characters. The next material is the relationship between Acari and plants / plants and their natural enemies. Then proceed with identification and introduction of the Acari pest in food plants, horticulture, and plantations. The final material is the identification of strategies and techniques for managing the population of Acari.	
Which previous course required? Agricultural Zoology	
Literature: Gerald W. Krantz & D. E. Walter, ed. (2009). *A Manual of Acarology* (3rd ed.)	
Materials provided: Slide of presentation	
Requirements for exam:75% Attendance	
Teaching method(s)	Lectures, Discussion, Assignments
Workload (hrs). Theoretical of course: 14 times Lab work: 7 times Home studies: Making a preparation of the Acari	