COURSE DETAIL

CROP-INSECT INTERACTIONS
Country Taiwan
Host Institution National Taiwan University
Program(s) National Taiwan University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences Agricultural Sciences
UCEAP Course Number 117
UCEAP Course Suffix
UCEAP Official Title CROP-INSECT INTERACTIONS
UCEAP Transcript Title CROP-INSECT INTERAC
UCEAP Quarter Units 3.00
UCEAP Semester Units 2.00

Course Description

As land plants are sessile organisms, they have evolved sophisticated defense mechanisms against various environmental stresses. To survive and reproduce, plants adapt to stresses by changing their physiology and gene expression. Insect herbivores are one of major biotic stresses to plants. As plants are the main nutrient sources for these insects, plants have evolved with a number of defense mechanisms to protect themselves. This course explains crop-insect interaction from several aspects (molecular mechanisms, traits, ecology, evolution, and practical farming management). Topics: plant traits to insects, insect traits to plants, tritrophic interactions, plant community ecology and evolution, and implications of crop-insect interactions. Text: C.M. Smith, PLANT RESISTANCE TO ARTHROPODS: MOLECULAR AND CONVENTIONAL APPROACHES; L.M. Schoonhoven, J.J.A. van Loon, and M. Dicke, INSECT-PLANT BIOLOGY. Assessment: final report, presentation, midterm exam, attendance and participation.

Language(s) of Instruction
English

Host Institution Course Number
Agron5091

Host Institution Course Title
CROP-INSECT INTERACTIONS

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Agronomy

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