

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 Course Details

http://nol.ntu.edu.tw/nol/coursesearch/print_table.php?course_id=621%20U6760&cl...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Agronomy

Course Last Reviewed

2022-2023

[Print](#)