

Module Name	In-vitro Culture
Module Level, if applicable	Intermediate
Code if Applicable	0310201262
Subtitle, if applicable	-
Courses, if applicable	0320201262 (In-vitro Culture)
Semester(s) in which the module is taught	3
Person responsible for the module	Dr. Ir. Syarif Husen, MP
Lecturer	Dr. Ir. Syarif Husen, MP
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department Agrotechnology, Faculty of Agriculture and Animal Science
Type of teaching, contact hours	Lecture, Project, Independent Learning
Workload	<ul style="list-style-type: none"> ● Lecture : 2 sks × 50 minutes × 16 weeks ● Project : 2 sks × 60 minutes × 16 weeks ● Independent Learning 2 sks × 60 minutes × 16 weeks ● Lab work 1 sks × 170 minutes × 16 weeks
Credit points	SKS 3 SCH x (1.5) = 4.5 ECTS
Requirements according to the examination regulations	<ol style="list-style-type: none"> 1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	<p>On successful completion in this course, student should be able to:</p> <ul style="list-style-type: none"> ● Understand meristem cell and tissue potential and media preparation ● Understand hormones, PGR as well as morphogenesis and embryogenesis ● Understand the application of tissue culture, meristem culture techniques ● Understand the problems and plantlet culture in vitro

<p>Module Content</p>	<p>This plant in vitro culture course explains the history, meaning and scope of plant in vitro culture; also understand the principles, prospects and advantages of in vitro culture; principles of planting material, cell totipotency, and meristem tissue; principles of media and their preparation; controlled environment principle, growth regulator; the principle of the process of morphogenesis and embryogenesis; in vitro culture laboratory; in vitro culture applications; apply meristem culture techniques; in vitro culture problems; and the process of acclimatization as a downstream of in vitro plant culture activities.</p>
<p>Study and examination requirements and forms of examination</p>	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments Psychomotor: Practice Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>