

Module designation	Laboratory Work in Plant Tissue Culture																															
Semester(s) in which the module is taught	Even/4th																															
Person responsible for the module	Lili Sugiyarto, M.Si., Paramita Cahyaningrum Kuswandi, M.Sc., Ph.D.																															
Language	Bahasa Indonesia																															
Relation to curriculum	Compulsory																															
Teaching methods	Lab works, project, seminar, exam																															
Workload (incl. contact hours, self-study hours)	Total workload is 91 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks.																															
Credit points	2 SKS (3.2 ECTS)																															
Required and recommended prerequisites for joining the module	Laboratory Work in Plant Physiology																															
Module objectives/intended learning outcomes	PLO-1, PLO-2, PLO-4, PLO-5, PLO-6, PLO-7, PLO-8, PLO-9, PLO-10, PLO-11																															
Content	This course discusses the types and functions of each tool needed for tissue culture lab; room and tool sterilization; planning to make stock and media for plant tissue culture; the germination of seeds using in vitro culture; and embryo culture from orchid seeds.																															
Examination forms	Presence, quiz, final semester exam, team based project.																															
Study and examination requirements	<p>The final mark will be weight as follow:</p> <table border="1"> <thead> <tr> <th>NO</th><th>Assessment Techniques</th><th>Percentage Weight Assessment (%)</th><th>Information</th></tr> </thead> <tbody> <tr> <td>1</td><td>Cognitive</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr> <tr> <td rowspan="3"></td><td>Presence</td><td>5</td><td></td></tr> <tr> <td>Quiz</td><td>10</td><td></td></tr> <tr> <td>Final Semester Exam</td><td>35</td><td></td></tr> <tr> <td>2</td><td>Participatory</td><td>50</td><td>Maximum assessment weight accumulation 50%</td></tr> <tr> <td rowspan="2"></td><td>Team Based Project</td><td>50</td><td></td></tr> <tr> <td><b>Total</b></td><td><b>100</b></td><td></td></tr> </tbody> </table>			NO	Assessment Techniques	Percentage Weight Assessment (%)	Information	1	Cognitive	50	Maximum assessment weight accumulation 50%		Presence	5		Quiz	10		Final Semester Exam	35		2	Participatory	50	Maximum assessment weight accumulation 50%		Team Based Project	50		<b>Total</b>	<b>100</b>	
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Reading list	<ul style="list-style-type: none"><li>A. Trigiano, R.N., &amp; Gray, D.J. 2011. Plant Tissue Culture, Development, and Biotechnology. CRC Press.</li><li>B. Smith, R. H. 2006. Plant Tissue Culture Techniques and Experiments 3rd ed. Elsevier Inc.</li><li>C. Kuswandi P.C., Ariyanti, N.A., Yunus, M.F. 2023. Anatomical, morphological and physiological leaf characters of black betel (Piper betle L. var. nigra) in varying natural and man-made habitats. Biodiversitas Journal of Biological Diversity.</li><li>D. R. Dwiyani, Y Fitriani, IS Mercuriani - Journal of Sustainable Agriculture, 2022.</li></ul>
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