



THE MODULE HANDBOOK
FACULTY OF BIOLOGY
MASTER PROGRAMME

PLANT ORGANOGENESIS

Module code	BIO 7063
Module level	2 nd year of Master Program in Biology
Abbreviation, if applicable	-
Courses related	-
Semester	Even
Course coordinator(s)	Dr. Suharyanto, MS., MSc.
Lecture(s)	1. Dr. Suharyanto, MS., MSc. 2. Prof. Dr. Issirep S (ret) 3. Dr. Maryani, MSc.
Language	Bahasa Indonesia and English
Classification within the Curriculum	Compulsory Courses Specific for Field of Interest
Teaching format/class hours per week during the semester	This course is organized into one class and planned to have 14 teaching weeks and 2 weeks of examination.
Workload	Estimated working hour: 7 hours/week.
Credit	2-0 credits
Requirements	BIO 20601
Course Learning Outcome	<ol style="list-style-type: none">1. Able to master the basic concepts, theories, and applications of plant organogenesis.2. Able to analyze and evaluate problems in plant organogenesis especially of economically valuable ones both in laboratories and fields.3. Able to apply the concepts of plant organogenesis and factors affecting it in laboratory or field researches



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Syllabus	Plant Organogenesis is a compulsory subject of botany interest learning about theories and concepts related to the formation of plant organ structures from various families. Anatomical characters specific to plant organs, Abnormalities in the development of plant organs Examples of plant organogenesis in various species and families
Study/exam achievements	a. Midterm: 35% b. Final examination: 40% c. Personal assignments: 10% d. Group assignments, quizzes : 15%
Forms of media	White board, notebook, LCD
Reference	<ol style="list-style-type: none">1. Anonim. 2008. The Biology of Zea maysspp. Mays (mays or corn). Australian of goverment office of the gene technology regulator.2. Engard C. J. (1944). ORGANOGENESIS IN RUBUS, The University of Hawai Honolulu, Hawai Research Publication No 213. Essau, K.1977. Anatomy of Seed Plant. John Willey, New York4. Fahn, A. 1990. Plant Anatomy. Pergamon Press. New York5. Howell, S,H. 1998. Molecular genetics of plant development. Cambridge University Press. United Kingdom.6. Husni, A., Wattimena G.A., Mariska1 I., Purwito A. (2003). Genetic variation of regenerated protoplast of eggplant. Jurnal Bioteknologi Pertanian, Vol. 8, No. 2, pp. 52-59.7. Kalimuthu*. K., R. Senthilkumar and N. Murugalatha (2006). Regeneration and mass multiplication of Vanilla planifolia Andr. – a tropical orchid. CURRENT SCIENCE, VOL. 91, NO. 10, 25 NOVEMBER *For correspondence. (e-mail: k_kalimuthu@rediffmail.com)8. Lyndon, R.F. 1990. Plant Development: The cellular basis. Cambridge University Press. United Kingdom9. Metcalfe, C. R. Dan L. Chalk. 1957. Anatomy of the Dicotyledons Vol. I. Oxford University Press. London10. Metcalfe, C. R. Dan L. Chalk. 1957. Anatomy of the Dicotyledons Vol. II. Oxford University Press. London11. Metcalfe, C. R. Dan L. Chalk. 1960. Anatomy of the Monocotyledons I. Graminae. Oxford University Press. London.12. Raghavan V. (1997) Molecular embryology of flowering plants. Cambridge University Press, The



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 15. Solis-Montero, L. T. Terazzas. 2013. Leaf architecture and anatomy of eleven species of *Mortonioidendron* (Malvaceae). *Plant syst evol.* 299: 553-566.
 16. Spatz, H., L. Kohler, dan T. Speck. 1998. Biomechanic and functional anatomy of hollow stemmed sphenopsids *Equisetum giganteum* (Equisetaceae). *American Journals of Botany.* 8(3): 305-314.
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 20. Wang T. L. and A. Cuming (1996). *Embryogenesis the generation of a plant.* BIOS Scientific Publisher Ltd. 9 Newtec Place, Magdalen Road, Oxford OX4 1RE, UK. Toppan Company (S) PTE Ltd 38 Liu Fang Road, Jurong Singapore 2262
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