

Georg-August-Universität Göttingen Universität Kassel/Witzenhausen Module M.SIA.P05: Organic cropping systems under temperate and (sub)tropical conditions	6 C 4 WLH
Learning outcome, core skills: Students are able to describe the principles and functions of agro-ecosystems, understand nutrient cycles and options for their improvement as an important basis of organic farming, evaluate systems of land use with a particular focus on organic modes of production and their role in agro-ecosystems, assess the role of livestock for nutrient cycling and with respect to the conservation of plant and animal biodiversity in (sub-)tropical settings.	Workload: Attendance time: 56 h Self-study time: 124 h
Course: Organic cropping systems under temperate and (sub)tropical conditions (Lecture, Excursion, Seminar) <i>Contents:</i> Visits of organic farms; case studies of livestock-oriented organic farming under different environmental conditions and constraints; development, evaluation and comparison of land use management systems under diverse natural, economic and socio-cultural conditions; nutrient cycling in plant-animal systems; site-specific contributions of legumes to N supply; P availability, P recycling and use of rock phosphates; modes of P supply in farming systems; EC, Australian, Japanese and North American regulations for organic farming – problems and opportunities.	4 WLH
Examination: Oral exam (ca. 15 minutes, 75%) and presentation (15 minutes, 25%) M.SIA.P05.Mp: Organic cropping systems under temperate and (sub)tropical conditions Examination requirements: Each individual test has to be passed. Kenntnisse von ökologischen Pflanzenanbausystemen, vom Management von Nährstoffkreisläufsystemen, von gezielter Nutzung von Leguminosen für die standortgerechte N-Versorgung sowie Kenntnisse über die Grundlagen der P-Verfügbarkeit, der P-Rückführung und der Nutzung von Rohphosphaten. Wissen über die Möglichkeiten der P-Versorgung in verschiedenen Anbausystemen, über die Unterschiede und Probleme bei den Ökostandards in EU, Japan, Australien und USA sowie Wissen über den Beitrag der Tierhaltung zur Nachhaltigkeit ökologischer Anbausysteme.	6 C
Admission requirements: none	Recommended previous knowledge: Basic knowledge in plant, soil and animal sciences
Language: English	Person responsible for module: Prof. Dr. Andreas Bürkert
Course frequency: each winter semester; Witzenhausen	Duration: 1 semester[s]
Number of repeat examinations permitted: twice	Recommended semester:

Maximum number of students:	
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not limited	
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Additional notes and regulations:
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Literature:

Altieri, M. 1987: Agroecology: the scientific basis of alternative agriculture. Westview Press, Boulder, Colorado, USA; Willer, H. et al. 2008: The World of Organic Agriculture - Statistics and Emerging Trends 2008, IFOAM, Bonn, Germany.
