■ シラバス標準モデル

Course titl	e Spe	Special Lecture on Comparative Agricultural Studies 7				Affiliated department, Job title,Name		Graduate School of Agriculture Associate Professor Ayako Katayama			
Target year	M1 students or above	credits	1	Course offered year/period	2025 Fall Semester	l law/neriod	31 Octob - 28 November 2025	Class style	Lecture	Language	English

[Overview and purpose of the course]

It is recognized that Indonesia is the country with the second-most diverse plants in the world, with 30,000 - 35,000 species of plants. In the local wisdom system, various types of plants are used to maintain body health by various tribes from generation to generation. In recent decades, traditional knowledge about medicinal plants has gradually revealed its benefits, especially in the health sector through scientific research.

[Course objectives]

This course will prepare students with a deep understanding of tropical biodiversity, especially Indonesian tropical biodiversity, local wisdom about how to use medicial plants, how they maintain traditional knowledge, translate the traditional knowledge into scientific knowledge, input the added value into the medicinal plant products at the modern era. The agricultural aspect and conservation of the medicinal plant is also an important key points in added value for medicinal plant products.

[Course Schedule and contents]

- 01: An introduction of Biodiversity (Oct 31st, 3rd period: 13:15-14:45)
- 02: Biodiversity of Indonesia (Oct 31st, 4th period: 15:00-16:30)
- 03: Ethnomedicine in Indonesia (Oct 31st, 5th period: 16:45-18:15)
- 04: How to explore the traditional knowledge of medicinal plants (Nov 7th, 3rd period: 13:15-14:45)
- 05: Scientification of jamu (Indonesian traditional medicine) (Nov 7th, 4th period: 15:00-16:30)
- 06: Recent medicinal plant research in Indonesia (Nov 7th, 5th period: 16:45-18:15)
- 07: Medicinal plant associated microbes (Nov. 28th, 3rd period: 13:15-14:45)
- 08: Feedback (Nov. 28th, 4rd period: 15:00-16:30)

[Course requirements]

English proficiency suitable for understanding lectures and contributing to discussion and reading. Common Japaneese will be accepted.

[Evaluation methods and policy]

Evaluation method:

The details will be announced in the first class.

A team-based term paper (report) and class performance are considered. Class performance criteria: active involvement in class and group/team discussions.

Evaluation policy:

Each student's achievement of the course aims shall be evaluated in accordance with the grading and evaluation policy of the Graduate School of Agriculture

[Textbooks]

[References, etc.]

- 1. Indonesian Academy of Sciences (AIPI), 2019. Science for Indonesia's Biodiversity.
- (https://aipi.or.id/assets/images/pdf/publication/AIPI_2019_Science_for_Indonesia_s_Biodiversity.pdf)
- 2. Elfahmi, Woerdenbagb, & Kayser, 2014. Jamu: Indonesian traditional herbal medicine
- towards rational phytopharmacological use. Journal of herbal medicine, 4(2): 51
- 3. Palupi et al., 2025. Plant Endophytic fungi: Powerful catalytic cells for biotransformation of chemical structures of biologically active compounds. Chemistry & Biodiversity, 2025; 22:e202402281. https://doi.org/10.1002/cbdv.202402281
- 4. LIPI, 2014. Current Updates on Indonesian Biodiversity (in Bahasa Indonesia). LIPI Press.
- 5. Indonesian Gov. 2024. Indonesian Biodiversity and Action Plan 2024 2025 (in Bahasa Indonesia). Bappenas.

[Study out of class (preparation and review)]

Scientific paper reading assignments

(Other information (office hour, etc.))

The lecture is given in English by a visiting research scientist, Dr. Andria Agusta, Research Professor , National Research and Innovation Agency (BRIN), INDONESIA