### COURSE: Introduction to Forage Crop Science

#### Summer Program

## **COURSE TUTOR**

Professor Yasuyuki Ishii, Faculty of Agriculture, University of Miyazaki

## COURSE OVERVIEW

Outline for the significance of forage crops cultivation and production mechanisms of herbaceous plants will be dedicated to understand the role of herbage production in the tropical and sub-tropical areas.

- 1. Forages . providing solutions for smallholder farmers (Livestock, Crop, Forage, Farmer)
- 2. How can forages help farmers? (Feed shortage, Cut-and-carry, Soil erosion, Protection of animal)
- 3. What are forages? (Variety, Grasses, Legumes, Yield, Nitrogen fixation, Mixed culture)
- 4. How to plant forages (Vegetative materials, Seed, Establishment, Planting rooted tillers)
- 5. Growth of green plants (Pattern of growth, Dry matter accumulation, Leaf area expansion)
- 6. Growth analysis (Crop growth rate, Relative growth rate, Net assimilation rate)
- 7. Partitioning (Vegetative growth, Reproductive growth, Storage)

### TEXTBOOKS AND READINGS

A list of further materials for each topic will be provided in order to assist students in the preparation for their class.

As for references,

Barnes, R. et al. (Eds.) Forages Vol. 1. 5th Ed., Iowa State Univ. Press, 1995.

Davies, A. et al. (Ed.) Sward Measurement Handbook (2nd Ed.), The British Grassl. Soc., 1993.

Stur, W.W. and P.M. Horne (2001) Developing forage technologies with smallholder farmers -How to grow, manage and use forages- ACIAR Monograph No. 88.

# COMMUNICATIONS

The course tutor's details are as follows:

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