## Examination Crops and Production Systems in the Tropics February, 8<sup>th</sup> 2011

- 1. Compare maize and cassava production
  - → Breeding system
  - → Reproduction method, Propagation
  - → Harvesting (how?)
  - → Preparation after harvesting
  - → Health problems (which? How to reduce toxicity?)
  - → Nutrition requirements
  - → Water stress?
- 2. What is climatic seasonality in the tropics? Explain.
- 3. What is the idea of biofuels? Name 3 plants which can be used for biofuel production. What are the advantages and problems of these plants?
- 4. What is the "alternating bearing cycle" in tree fruit crops? How can it be managed by farmers?
- 5. Define GMO. List 3 objects with their properties. Explain the procedure of how they reached these properties.
- 6. Describe the differences between organic and conventional banana production.
- 7. Rice production in a monsoon effected area: Which rice production systems do indigenous farmers use? Population has been growing; therefore they introduced advanced production systems and techniques. What could it be?
- 8. Define reduced tillage in soy bean and rice. What is the advantage?
- 9. List 3 pathways of photosynthesis. Give example. Which environmental factors affecting photosynthesis rate? What is carbohydration?
- 10. What are agroforestry systems? What are the main advantages of agroforestry systems compared to monocultures?

Comments to the examination: - not enough time to answer all the questions; - second date was oral examination