



Eastern University, Sri Lanka  
Third year First Semester Examination in Agriculture 2005/2006  
(External Degree)  
(February/March/April 2011)

AGB 3102 Crop Breeding and Techniques

Answer All Questions.

Time: 02 Hours

- Q1. Rust resistance is controlled by a pair of recessive alleles ( $rr$ ) in ground nut. This resistance should be introduced into a cultivated variety of ground nut that is susceptible to rust disease.  
Describe the breeding method for this.
- Q2. Write an account on each of the following:
- Different ways contributing to the evaluation of crop plants
  - Basic genetic resources and their contribution to plant breeding.
- Q3. Describe
- Recurrent selection to increase the seed oil content in maize.
  - Procedure to screen crop varieties against soil-borne pathogens.
- Q4. Briefly explain
- Heritability and its significance
  - Genetic male sterility and its importance
  - Acclimatization of crop varieties.