### 11 1 OCT 2014

### **EASTERN UNIVERSITY**

# Third Year First Semester Examination in Agriculture - 20011/12

## AB 3101 CROP IMPROVEMENT TECHNOLOGY

### Answer all questions

### Time: 1 Hour

a) A groundnut cultivar with desirable agronomic characters is found susceptible to leaf rust disease. It is proposed to introduce leaf rust resistance into this cultivar where leaf rust resistance is controlled by a pair of recessive genes 'rr'.

Outline the breeding method to introduce leaf rust resistance into this groundnut cultivar.

- b) Describe the recurrent selection method to increase oil content in maize.
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- a) Give the important steps to screen varieties for foliage diseases.
- b) Discuss a successful breeding programme to develop new varieties of a named crop.