

Course code : AGR 203

Couse Title : Grain Legumes and Oilseed Crops

Credit Hours : 2 (1+1)

Full marks: 50 Theory: 25

Practical: 25

OBJECTIVES

Upon the completion of this course, the students will have the knowledge for grain legumes and oil seed crops production

I. SYLLABUS

Introduction, importance and area of production of grain legumes and oil seed crops, lentil and chickpea, pigeon pea, soybean, black gram, rapeseed and mustard, groundnut, sesame, sunflower and linseed.

II. COURSE OUTLINE

A. Lecture

S.N.	Topic	No. of Lectures
1.	Introduction to grain legumes	3
1.1	Introduction and importance of grain legumes in Nepal	
1.2	Area, production and productivity of grain legumes in Nepal over the years	
1.3	Major problems, present research status and future research strategies to uplift the grain legumes production in Nepal	
2.	Introduction to oil seed crops	2
2.1	Introduction and importance of oil seed crops in Nepal, production and productivity of major oil seed crops in Nepal over the years	
2.2	Major problems, present research status and future research strategies to uplift the oil seed production in Nepal	
3.	Importance, origin and distribution, classification, soil and climatic requirements, land preparation and improved cultural practices, manures and fertilizer application, seed and sowing, recommended varieties, weed and water management, harvesting, threshing, yield and storage of grain legumes and oil seed crops	10
3.1	Lentil	
3.2	Chickpea	
3.3	Pigeon pea	
3.4	Soybean	
3.5	Moong bean and black gram	
3.6	Rape seed and mustard	
3.7	Ground nut	
3.8	Sesame	
3.9	Sunflower	
Total		15

B. Practical

S.N.	Topic	No. of Practical
1.	Identification of various grain legumes grown in Nepal	1
2.	Identification of various oil seed crops grown in Nepal	1
3.	Morphology and phenology of grain legumes	1
4.	Morphology and phenology of grain legumes	1
5.	Field preparation for grain legumes	1
6.	Field preparation for oil seed crops	1
7.	Calculation of seed required for the sole and intercropping system with legumes and oil seed crops	1
8.	Calculation of fertilizer required for the sole and intercropping system with legumes and oil seed crops	1
9.	Seed inoculation of grain legumes	1
10.	Seed treatment of oil seed crops	1
11.	Sowing of grain legumes crop varieties	1
12.	Sowing of oil seed crop varieties	1
13.	study of root nodules and nodulation behavior of some grain legumes	1
14.	Study of legumes and oil seed in cropping system	1
15.	A visit to NGLRP, Rampur, Chitwan	1
Total		15

REFERENCES

1. Singh, C. 1997. Modern Techniques of Raising Field Crops. Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi
2. Rethore, P. S. 1999. Techniques and management of field crop production. Agrobios, Jodhpur, India
3. Thakur, C. 1979. Scientific crop production. Vol 1 and 2. Metropolitan Book Co. Pvt. Ltd., New Delhi