

Course Code : HRT 204

Course Title : Vegetable and Spice Crop Production

Credit Hours : 3 (2+1) Full Marks: 75 Theory: 50 Practical: 25

OBJECTIVES

Upon the completion of this course, the students will be able to know basic knowledge and skills on the principles and practices of vegetable and spice crop production in Nepal.

I. SYLLABUS

Importance, prospects and constraints in vegetable and spice crop production in Nepal, basic principle of vegetable and spice crop production, classification of vegetables and spice crops, climatic and edaphic factors affecting production and quality, off- season and protected cultivation, nursery management, crop raising and its harvesting, area and production in Nepal, climate and soil, important varieties, field management, plant protection measures and physiological disorders if any, off- season/protected production, seed production, harvesting of: solanaceous crops, cole crops, bulb crops, leguminous crops, okra and spice crops, brief introduction to minor crops.

II. COURSE OUTLINE

A. Lecture

S.N.	Topics	No. of Lectures
1.	Importance, prospects and constraints in vegetable and spice crops production in Nepal	1
2.	Basic principles of vegetable and spice crop production	3
	2.1 Classification of vegetable and spice crops	
	2.2 Off-season and protected cultivation of vegetable crops	
	2.3 Nursery care and management	
3.	Production practices of the following vegetable and spice crops which include origin, distribution, area and production in Nepal, climate and soil, important varieties, field management, plant protection measures, physiological disorder (if any), seed production and harvesting:	21
	3.1 Potato	
	3.2 Tomato	
	3.3 Brinja	
	3.4 Chilli and sweet pepper	
	3.5 Cauliflower	
	3.6 Cabbage	
	3.7 Brocauli	
	3.8 Radish	
	3.9 Carrot	
	3.10 Turnip	
	3.11 Rayo	
	3.12 Cress, Spinach and Swiss chard	
	3.13 Cucumber, pumpkin and summer squash	
	3.14 Bottle gourd, bitter gourd, sponge gourd	
	3.15 Water melon and pointed gourd	
	3.16 Peas and beans	
	3.17 Onion	
	3.18 Garlic	
	3.19 Okra	

3.20	Ginger and turmeric	
3.21	Coriander, cumin and fenugreek	
4	Brief introduction to the following minor crops:	5
4.1	Ridge gourd, snake gourd, chayote, muskmelon and asparagus	
4.2	Sweet potato, colocasia, yam, cassava and garden beet	
4.3	Amaranthus, Brussel's sprout, lettuce, celery and knol-khol	
4.4	Broad bean, winged bean, hyacinth bean, cowpea and fennel	
4.5	Bamboo shoots, parsnip, tree tomato and dill	
Total		30

B. Practical

S.N.	Topics	No. of Practical
1.	Identification of seasonal vegetable and spice crop plants (fresh) and study morphology of the edible parts (major crops)	1
2.	Identification of seeds of vegetable and spice crops (prepare catalogue)	1
3.	Layout of kitchen garden	1
4.	Nursery raising of different vegetable crops	1
5.	Forcing of cucurbits in winter	1
6.	Computation and application of manure and basal dose chemical fertilizers	1
7.	Transplanting of the seedlings	1
8.	Mulching and watering	1
9.	Intercultural operations, top dressing and application of micro-nutrients	1
10.	Practices of staking and pruning	1
11.	Preparation and application of pesticides	1
12.	Use of PGR in vegetable crops	1
13.	Harvesting and postharvest handling of selected vegetable and spice crops	1
14.	Display and judging of the fresh vegetables	1
15.	Visit to near by commercial vegetable farm	1
Total		15

REFERENCES

AVRDC, 1992. Vegetable Production Training Manual. Asian Vegetable Research and Development Center, Shanhua, Tainan, Taiwan.

ICAR, 2001. Text Book of Vegetables, Tuber Crops and Spices, (Ed. S. Thamburaj and Narendra Singh), Indian Council of Agricultural Research, New Delhi, India.

Pun, L. and Karmacharya, B. B. 1988. Trainer's Manual "Vegetables" Manpower Development Agric. Project, Kathmandu.

Shakya, S.M.; Thapa, F. and Pant, J. 1991. Laboratory Manual on "Vegetable Production and Ornamental Horticulture", IAAS, Rampur, Chitwan.

Swarup, V. 2006. Vegetable Science and Technology. Kalyani Pub., New Delhi.