

## ORNAMENTAL PLANTS PRODUCTION

**ISCED UNIT CODE:** 0812 451 11A

**TVET CDACC UNIT CODE:** HO/CU/HP/CR/03/5/MA

**Unit duration:** 80 Hours

### **Relationship to Occupational Standards**

This unit addresses the Unit of Competency: **Produce ornamental plants**

### **Unit Description**

This unit specifies the competencies required to produce ornamental plants. It involves preparing ornamental plants planting materials, establishing ornamental plants, managing ornamental plants and performing ornamental plants post-harvest practices.

### **Summary of Learning Outcomes**

SNO	Learning Outcome	Duration (Hours)
1.	Prepare ornamental plants planting materials	10
2.	Establish ornamental plants	20
3.	Manage ornamental plants	30
4.	Perform ornamental plants post-harvest practices	20
	<b>TOTAL</b>	<b>80</b>

### **Learning Outcomes, Content and Suggested Assessment Methods**

Learning Outcomes	Content	Suggested Assessment Methods
1. Prepare ornamental plants planting materials	<b>Theory</b>  1.1 Nursery site selection 1.1.1 Definition of ornamental plants 1.1.2 Importance of nursery site	<ul style="list-style-type: none"><li>• Written tests</li><li>• Reflection papers</li><li>• Projects</li><li>• Interviews/ Oral</li></ul>

	<p>selection</p> <p>1.1.3 Factors considered when siting a nursery</p> <p>1.1.4 Tools, equipment and materials used</p> <p>1.1.4.1 Panga</p> <p>1.1.4.2 Jembe</p> <p>1.1.4.3 Slashers</p> <p>1.1.4.4 Rake</p> <p>1.1.4.5 Seeds</p> <p>1.1.4.6 Splits</p> <p>1.1.4.7 Suckers</p> <p>1.2 Nursery preparation</p> <p>1.3 Planting seeds in a nursery</p> <p>1.4 Nursery management practices</p> <p>1.4.1 Mulching</p> <p>1.4.2 Shading</p> <p>1.4.3 Hardening off</p> <p>1.4.4 Watering</p> <p>1.4.5 Fertilizer application</p> <p>1.4.6 Pest and diseases control</p> <p>1.4.7 Pricking out</p> <p><b>Practice</b></p> <p>1.5 Carry out a nursery bed preparation and planting</p> <p>1.6 Carry out nursery bed management practices</p>	<p>questions</p> <ul style="list-style-type: none"> <li>• Individual/group assignments</li> <li>• Practicals</li> </ul>
2. Establish ornamental plants	<p><b>Theory</b></p> <p>2.1 Preparation of the land</p> <p>2.2 Planting of seedlings</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> </ul>

	<p>2.3 Field management practices</p> <p><b>Practice</b></p> <p>2.4 Carry out land preparation using various methods.</p> <p>2.5 Carry out planting of seedlings</p> <p>2.6 Carry out field management practices</p>	<ul style="list-style-type: none"> <li>• Interviews/ Oral questions</li> <li>• Individual/group assignments</li> <li>• Practicals</li> </ul>
3. Manage ornamental plants	<p><b>Theory</b></p> <p>3.1 Field management practices</p> <p>3.1.1 Gapping</p> <p>3.1.2 Thinning</p> <p>3.1.3 Fertilizer application</p> <p>3.1.4 Pest and disease control</p> <p>3.1.4.1 Causal agent</p> <p>3.1.4.2 Signs and symptoms</p> <p>3.1.5 Irrigation</p> <p>3.1.6 Mulching</p> <p>3.2 Harvesting of ornamental plants</p> <p>3.3 Management of wastes</p> <p><b>Practice</b></p> <p>3.4 Carry out management practices using various methods</p> <p>3.5 Carry out harvesting of oil crops</p> <p>3.6 Carry out management of waste in an orchard</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> <li>• Interviews/ Oral questions</li> <li>• Individual/group assignments</li> <li>• Practicals</li> </ul>
4. Perform ornamental plants post-harvest practices	<p><b>Theory</b></p> <p>4.1 Post-harvest practices</p> <p>4.2 Examples of post-harvest practices</p>	<ul style="list-style-type: none"> <li>• Written tests</li> <li>• Reflection papers</li> <li>• Projects</li> </ul>

	<p>4.2.1 Cooling</p> <p>4.2.2 Freezing</p> <p>4.2.3 Drying</p> <p>4.2.4 Grading</p> <p>4.2.5 Sorting</p> <p>4.2.6 Packaging</p> <p>4.2.7 Storage</p> <p>4.2.8 Transportation</p> <p>4.3 Marketing techniques</p> <p>4.3.1 Online marketing</p> <p>4.3.2 Influencer marketing</p> <p>4.3.3 Public relation</p> <p>4.4 Management of wastes</p> <p><b>Practice</b></p> <p>4.5 Carry out post-harvest practices using various methods</p> <p>4.6 Carry out the management of waste</p>	<ul style="list-style-type: none"> <li>• Interviews/ Oral questions</li> <li>• Individual/group assignments</li> <li>Practicals</li> </ul>
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### Suggested Methods of Instruction

- Role playing
- Group discussion
- Direct instruction
- Role playing
- Group discussion
- Direct instruction
- Questionnaires
- Interviews
- Experiment
- Survey
- Observation

## **Recommended Resources for 25 Trainees**

### **Tools**

- 25 Hoes
- 25 Machetes
- 25 Secateurs
- 25 Shovels
- 25 Soil augur
- 25 Panga
- 25 Pegs

### **Equipment's**

- 25 Hammers
- 25 Saw
- 25 Buckets
- 25 Secateurs
- 25 Shears
- 25 Dibblers
- 25 Spray pumps
- 25 Watering cans
- 25 Hose pipes
- 25 Ploughs
- 25 Harrows
- 25 Ridges
- 25 Boom sprayer
- 25 Pruning saw
- 25 Wire strainers
- 25 Traps
- 25 Pipe sprinklers
- 25 Scouting flags

- 25 Storage tanks
- 25 Tractors
- 25 Grading shed
- 25 Bud count square
- 25 Meteorological equipment

### **Materials**

- 25 Pesticides
- Fertilizers
- 25 Stationery
- Manures
- 25 Seedlings /planting materials
- 25 Khaki paper bags size 3
- 25 Rope
- 25 Nets
- 25 Translucent papers
- 25 Papers
- 25 Plantlets
- 25 Tissue culture
- 25 Embryo culture
- 25 Papers
- 25 Fencing wire
- 25 Staking sticks
- 25 Nails
- 25 Herbicides
- 25 Pesticides
- 25 Pheromones
- 25 Seeds
- 25 Seedlings
- 25 Splits

- 25 Crowns
- 25 Slips
- 25 Cuttings
- 25 Suckers