

## PASSION FRUIT SEEDLING PRODUCTION

**ISCED UNIT CODE:**0811 251 01A

**TVETCDACC UNIT CODE:**AG/CU/PF/CR/01/3/MA

### Relationship to Occupational Standards

This unit addresses the unit of competency: Produce passion fruit seedlings.

**Duration of Unit:** 40 hours

### Unit Description

This unit specifies the competencies required to produce passion fruit seedlings. It involves establishing a passion fruit nursery, maintaining nursery beds, preparing potted and grafted seedlings, and controlling pests and diseases.

### Summary of Learning Outcomes

SNO	Learning Outcome	Duration (hours)
1.	Establish passion fruit nursery	5
2.	Maintain nursery beds	5
3.	Prepare potted seedlings	10
4.	Prepare grafted seedlings	10
5.	Control pests and diseases	10

### Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Establish passion fruit nursery	1.1 Definition of terms: 1.1.1 Nursery 1.1.2 Planting 1.1.3 Planting materials 1.2 Factors to consider when siting a nursery 1.3 Nursery certification requirements	<ul style="list-style-type: none"><li>Observation</li><li>Practical test</li><li>Portfolio of evidence</li><li>Project</li><li>Oral questioning</li><li>Written tests</li></ul>

<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
	1.4 Nursery structures 1.4.1 Types of nursery structures 1.5 Preparation of nursery structures 1.5.1 Tools equipment, materials and supplies 1.5.2 Preparation procedure 1.6 Planting media 1.6.1 Types of planting media 1.6.2 Preparation of planting media 1.6.3 Mixing ratio 1.6.4 Treatment 1.7 Clean planting materials 1.7.1 Types of planting material 1.7.2 Sources and selection 1.8 Planting procedures	<ul style="list-style-type: none"> <li>• Assignments</li> <li>•</li> </ul>
2. Maintain nursery beds	2.1 Nursery maintenance practices 2.1.1 Irrigation and mulching methods and procedures 2.1.2 Thinning 2.1.3 Weed control 2.1.4 Fertilizer application	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Practical test</li> <li>• Portfolio of evidence</li> <li>• Project</li> <li>• Oral questioning</li> <li>• Written tests</li> <li>• Assignments</li> <li>• Third party reports</li> </ul>
3. Prepare potted seedlings	3.1 Definition of terms 3.1.1 Potting, pricking in and pricking out, 3.2 Tools, equipment, materials, and supplies 3.2.1 Identification	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Practical test</li> <li>• Portfolio of evidence</li> <li>• Oral questioning</li> <li>• Written tests</li> </ul>

<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
	3.2.2 Use and maintenance 3.3 Potting materials <ul style="list-style-type: none"> <li>3.3.1 Potting media</li> <li>3.3.2 Mixing ratios</li> <li>3.3.3 Potting sleeves</li> </ul> 3.4 Potting techniques 3.5 Post-pricking care <ul style="list-style-type: none"> <li>3.5.1 Watering</li> <li>3.5.2 Provision of shade</li> <li>3.5.3 Weed control</li> </ul> 3.5.4 Fertilizer application 3.6 Record keeping and management	<ul style="list-style-type: none"> <li>• Assignments</li> <li>• Third party reports</li> </ul>
4. Prepare grafted seedlings	4.1 Definition of terms; scions, rootstock, grafting 4.2 Tools, equipment, materials, and supplies <ul style="list-style-type: none"> <li>4.1.1 Identification</li> <li>4.1.2 Use and maintenance</li> </ul> 4.3 Grafting 4.4 Grafting materials stages 4.5 Methods and procedures 4.6 Maintenance of grafted seedlings <ul style="list-style-type: none"> <li>4.6.1 Healing</li> <li>4.6.2 Watering</li> <li>4.6.3 Hardening</li> </ul> 4.7 Weed control 4.8 Routine pruning 4.9 Fertilizer application 4.10 Recording keeping and management	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Practical test</li> <li>• Portfolio of evidence</li> <li>• Project</li> <li>• Oral questioning</li> <li>• Written tests</li> </ul>

<b>Learning Outcome</b>	<b>Content</b>	<b>Suggested Assessment Methods</b>
5. Control pests and diseases	5.1 Scouting procedure 5.2 Signs & symptoms of pests and diseases 5.3 Methods of controlling pests and diseases 5.4 Disease control records	2.1 Observation 2.2 Practical test 2.3 Portfolio of evidence 2.4 Oral questioning 2.5 Written tests

### **Suggested Methods of Instruction**

- Demonstration by trainer
- Direct instruction by trainer
- Practice by the trainee
- Role play
- Simulation
- Field trips / site visits
- Group discussions
- Computer aided learning
- Viewing relevant videos
- Guest speakers
- Assignments

## **Recommended Resources for 25 Trainees**

- 25 Buckets
- Assorted Chemicals
- 5 Computers
- Assorted Fertilizers
- 1 pickup Forest soil
- 5 Fork jembes
- 25 rolls of Grafting tape
- 2 Healing chambers
- 5 Hoes
- 5 Knapsack sprayers
- 5 LCD Projectors
- 25 Machetes
- Manure
- 2 Nursery structure
- Assorted Pesticides
- Assorted Polybags and polytubes
- 25 sets of PPEs
- 25 Pruning knives
- 5 Rakes
- 1 pickup of Sand
- 25 Secateurs
- Assorted Seedling tubes
- 2 Shade nets
- 10 Slashers
- 25 Sockets
- 5 Soil sterilisation equipment
- Viable passion fruit seeds (for root stock)
- Passion fruits cuttings for scion
- Water
- 10 Watering cans
- 5 Wheel barrows