

PRODUCE VINE FRUITS

ISCED UNIT CODE: 0812 451 12A

TVETCDACC UNIT CODE: HO/OS/HP/CR/02/5/MA

UNIT DESCRIPTION

This unit specifies the competencies required to produce quality and clean vine fruits. It involves establishing vine fruits nursery, establishing vine fruits orchard, managing vine fruits and performing vine fruits post-harvest practices.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
These describe the key outcomes which make up workplace function.	These are assessable statements which specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the range.</i>
1. Establish vine fruits nursery	1.1 <i>Personal protective equipment's</i> are worn as per work requirement 1.2 Nursery site is selected based on farm layout 1.3 Nursery site soil analysis is performed as per work procedure 1.4 <i>Tools, equipment</i> and <i>materials</i> are assembled as per work requirement. 1.5 Nursery is prepared according to agronomic requirements of vine fruits. 1.6 Planting materials are raised in nursery as per work procedure. 1.7 Vine fruits <i>nursery management practices</i> are performed as per agronomic requirements.
2. Establish Vine fruits orchard	2.1 Personal protective equipment's are worn as per work requirement 2.2 Orchard site is selected based on farm plan 2.3 <i>Tools, equipment</i> and <i>materials</i> are assembled as per work requirement 2.4 Land clearing is performed as per agronomic requirements 2.5 <i>Tillage practices</i> are carried out as per agronomic requirements

	<p>2.6 Soil and water conservation measures are applied as per agronomic needs</p> <p>2.7 Soil amendments are applied as per soil analysis report</p> <p>2.8 Seedlings are transplanted as per agronomic requirements</p>
3. Manage vine fruits	<p>3.1 Tools and equipment for carrying out management practices are assembled as per work requirement</p> <p>3.2 Gapping is carried out on vine fruits as per agronomic requirements</p> <p>3.3 Training, trellising and pruning is carried out on vine fruits as per agronomic requirements</p> <p>3.4 Crop protection practices are carried out on vine fruits as per agronomic requirement</p> <p>3.5 Physiological disorders are managed as per agronomic requirement</p> <p>3.6 Fertilizers are applied as per agronomic requirements</p> <p>3.7 Vine fruits are mulched as per agronomic requirements</p> <p>3.8 Vine fruits are watered as per agronomic requirements</p> <p>3.9 Vine fruits are induced to flower as per agronomic requirements</p> <p>3.10 Vine fruits are harvested as per agronomic requirement</p> <p>3.11 Waste management is undertaken in accordance to work requirement</p>
4. Perform vine fruits post-harvest practices	<p>4.1 Tools and equipment for carrying out post-harvest practices are assembled as per work requirement</p> <p>4.2 Quality and quantity of vine fruits is assessed as per work procedures</p> <p>4.3 Post-harvest practices are carried out in accordance to work requirement</p> <p>4.4 Marketing of vine fruits is performed as per organizational policy.</p> <p>4.5 Waste management is undertaken in accordance to work requirement</p>

RANGE

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

Variable	Range
<p>1. Vine fruits may include but are not limited to:</p>	<ul style="list-style-type: none"> • Passion fruit • Water melon • Kiwi • Straw berry • Cucumber • Grapes • Dragon fruit • Rasp berry
<p>2. Tools, equipment and materials may include but are not limited to:</p>	<ul style="list-style-type: none"> • Hoes • Machetes • Secateurs • Shovels • Soil augur • Panga • Pegs • Hammer • Saw • Bucket • Secateurs • Shears • Dibbler • Pegs • Spray pumps • Watering cans • Hose pipes • Plough • Harrows • Ridges • Boom sprayer

	<ul style="list-style-type: none"> • Pruning saw • Wire strainer • Traps • Pipe sprinklers • Scouting flags • Storage tanks • Tractors • Grading shed • Bud count square • Meteorological equipment • Pesticides • Fertilizers • Stationery • Manures • Seedlings /planting materials • Khaki paper bags size 3 • Rope • Nets • Translucent papers • Papers • Fencing wire • Staking sticks • Nails • Herbicides • Pesticides • Pheromones • Seeds • Seedlings • Splits • Crowns • Slips • Cuttings
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	<ul style="list-style-type: none"> • Suckers • Plantlets
3. Nursery management practices may include but are not limited to:	<ul style="list-style-type: none"> • Mulching • Watering • Fertilizer application • Weed control • Pest control • Disease control • Shading • Hardening off
4. Personal protective equipment may include but are not limited to:	<ul style="list-style-type: none"> • Dust coat/Apron • Gumboots • Gloves • Face mask
5. Soil amendments may include but are not limited to:	<ul style="list-style-type: none"> • Organic fertilizers • Inorganic fertilizers • Liming agents • Agricultural gypsum
6. Tillage practices may include but are not limited to:	<ul style="list-style-type: none"> • Primary Tillage • Secondary • Tertiary
7. Crop protection practices may include but are not limited to:	<ul style="list-style-type: none"> • Weed control • Pest control • Disease control
8. Post-harvest practices may include but are not limited to:	<ul style="list-style-type: none"> • Drying • Sorting • Grading • Packaging • Storage
9. Marketing techniques may	<ul style="list-style-type: none"> • Online marketing • Influencer marketing • Referrals

include but are not limited to:	<ul style="list-style-type: none"> • Advertisement • Auctioneering • Public relation • Cold calling • Content marketing • Invoicing • Loyalty programs
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REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required skills

The individual needs to demonstrate the following skills:

- Analytical
- Sampling
- Training
- Tilling
- Measuring
- Levelling
- Gaping
- Pruning
- Spraying
- Pests, diseases and nutrients deficiency scouting
- Equipment calibration
- Technical Report writing
- Produce handling
- Soil sampling
- Observation
- Negotiation
- Digital literacy

Required knowledge

The individual needs to demonstrate knowledge of:

- Agro Ecological Zonation

- Vine fruit orchard establishment and management
- Types of vine fruits
- Physiology of vines
- Types of tools and equipment used in production of vine fruits
- Soil sampling and testing
- Soil conservation
- Phyto-sanitary requirements
- Good Agricultural Practices
- Sources of quality planting materials for vine fruit trees
- Husbandry practices in vine fruit production
- Vine fruit production Technologies
- Flower induction
- Maturity indices in vine fruits
- Harvesting and post harvesting handling of vine fruits
- Accounting principles
- Production records and reports
- Waste management
- Occupational Safety and Health Procedures
- General management of vine fruit production farm

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Selected and prepared nursery site according to agronomic requirements of the fruit</p> <p>1.2 Performed Sowing of seeds/cuttings as per agronomical requirements</p> <p>1.3 Prepared seedbed as per fruit tree agronomic requirements</p> <p>1.4 Transplanted seedlings based on agronomic requirements</p> <p>1.5 Carried out management practices on vine fruit trees which may include but are not limited to: watered, pest and diseases</p>
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	<p>control, feeding, mulched and trained as per agronomic requirements</p> <p>1.6 Harvested vine fruits and carried out post-harvest management practices as per agronomic requirement</p> <p>1.7 Carried out post-harvest practices in accordance to work requirement</p> <p>1.8 Managed wastes generated in production process in accordance to work requirement</p>
2. Resource implications for competence certification	<p>The following resources must be provided during assessment:</p> <p>2.1 Appropriately simulated environment where assessment can take place</p> <p>2.2 Access to relevant work environment</p> <p>2.3 Resources relevant to the proper activities or tasks</p>
3. Methods of assessment	<p>Competency may be assessed through:</p> <p>3 Practical</p> <p>4 Project</p> <p>5 Third party report</p> <p>6 Portfolio of evidence</p> <p>7 Written tests</p> <p>8 Oral questioning</p>
4. Context of assessment	<p>4.1 This competency may be assessed in a workplace or in a simulated workplace.</p>
5. Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended.</p>