

Competency Standards for Caribbean Vocational Qualifications (CVQ)

CCAGTC1012 CVQ Level 1 – Tree Crop Farming

Unit Code	Unit Title	Mandatory/ Elective
AG01002	Observe workplace health and safety requirements	Mandatory
AG01003	Plan and organise work	Mandatory
AG00001	Transport physical resources within work area	Mandatory
AG00700	Prepare land for planting	Mandatory
AG00701	Plant trees and shrubs	Mandatory
AG00702	Maintain planted area	Mandatory
AG00703	Support crop harvesting	Mandatory
AG00226	Maintain selected equipment	Mandatory
AG00551	Use hazardous substances safely	Elective
AG00704	Implement pest and disease control measures	Elective

To achieve this qualification all mandatory units and a minimum of 1 elective must be achieved.

Unit Descriptor:

This unit deals with the skills and knowledge required for observing health and safety requirements in the workplace. It describes the work expectations associated with maintaining a clean, safe and efficient workplace, rendering emergency procedures and participating in maintenance of health and safety of persons in the workplace.

ELEMENTS**PERFORMANCE CRITERIA**

Candidates must be able to:

1	Maintain a clean, safe and efficient workplace	1.1	Use suitable protective clothing and equipment in performing duties, in accordance with workplace procedures
		1.2	Carry out basic safety checks before operation of all workplace machinery and vehicles and report hazards to the appropriate supervisor in accordance with workplace procedures
		1.3	Identify risks prior to performing manual handling jobs and carry out work according to recommended safe industry practices
		1.4	Take action to reduce risks associated with jobs in the workplace, in accordance with workplace procedures
		1.5	Clean work area, tools and equipment and dispose of waste materials according to workplace procedures, before the end of work day
		1.6	Maintain tools and equipment following manufacturer's specifications
2	Render emergency procedures	2.1	Follow company's emergency procedures in the event of an emergency situation
		2.2	Use emergency equipment in accordance with manufacturers' specifications and workplace requirements
3	Participate in maintaining health and safety of persons in the workplace	3.1	Notify appropriate authorities of health and safety issues according to company's policy
		3.2	Provide feedback on monitoring health and safety issues to supervisor according to workplace procedures

RANGE STATEMENT

Protective clothing and equipment include:

- headgear
- eye protector
- ear protector
- respirator
- dust mask
- long sleeved shirts and pants
- gloves
- boots

Hazardous manual handling tasks include:

- moving
- lifting
- carrying bags, drums, cartons
- shovelling
- loading materials
- pulling
- pushing
- emptying containers
- chipping weeds
- picking fruit or vegetables
- sharpening tools

Risk to bystanders include:

- run-over and injury associated with vehicles
- and machinery
- exposure to noise
- chemical drift
- airborne debris

Legislation, guidelines, codes and national standards relevant to the workplace include:

- national labour laws
- Occupational Safety & Health (OSH) 2004
- hygiene requirements
- first aid requirements

Hazards in the workplace include:

- plant and machinery operation and maintenance
- vehicles including motorcycles
- noise
- chemicals
- manual handling
- dust
- inclement weather conditions
- electricity
- waterways
- biological

OSH emergencies in the workplace include:

- electrocution
- fire
- flood
- chemical spills
- physical injury
- biological

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. What are the significant hazards in the workplace
2. What are the workplace procedures for hazard identification and risk control
3. What are the local emergency services
4. What procedures to following in the event of an emergency
5. How to perform first aid

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- carry out basic safety checks before operation of all workplace machinery and vehicles and report hazards to the appropriate supervisor
- use suitable protective clothing and equipment in performing duties
- identify risks prior to performing manual handling jobs and carry out work according to recommended safe industry practices
- follow company's emergency procedures in the event of an emergency situation

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be gathered through a variety of ways including direct observation, supervisor's reports, project work, practical demonstration of tasks and functions and oral and written questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to a suitable venue and all materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

AG01003

Plan and Organise Work

Unit Descriptor:

This unit deals with the skills and knowledge required to plan and organise work. This unit describes the work activities for the daily planning that is required with regard to work duties. It includes the organisation of tools and equipment and the recording of information about the job at hand.

ELEMENTS**PERFORMANCE CRITERIA**

Candidates must be able to:

1	Plan and manage tasks	1.1	Arrive at the workplace at the allocated time in accordance with workplace procedures
		1.2	Obtain workplace activities, allocated tasks and priorities from the supervisor
		1.3	Identify sequence of tasks to complete allocated activities
		1.4	Select appropriate personal protective equipment, tools equipment and materials for the task
		1.5	Identify start and end times for tasks to be accomplished in accordance with schedule
		1.6	Complete required documentation in accordance with workplace procedures
2	Respond to problems	2.1	Identify problems that may arise in carrying out tasks and take preventative action following workplace procedures
		2.2	Report problems that cannot be solved to the supervisor in accordance with workplace procedures

RANGE STATEMENT

Work activities include:

- daily routines
- periodic routines
- ad hoc activities

Legislation, guidelines, codes and national standards relevant to the workplace include:

- Occupational Safety & Health Act 2004
- hygiene requirements
- first aid requirements

Problems which may arise include:

- colleague absence
- personal illness
- emergency situations
- natural disasters
- equipment failure

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. What are the products and processes used in the workplace
2. How to apply time management skills
3. What are the company's procedures for using and storing tools
4. How to complete forms
5. How to estimate duration of time to perform assigned tasks
6. How to interpret work schedules
7. How to organize materials, tools and equipment
8. How to respond to problems
9. How to plan tasks

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include the ability to:

- plan and organise assigned tasks to the level acceptable by the enterprise
- report and record within established routines using methods and procedures that are predictable

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence may be gathered through a variety of ways including direct observation, supervisor's reports, project work, practical demonstration of tasks and functions and oral and written questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to a suitable venue and all materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

AG00001**Transport Physical Resources within Work Area**

Unit Descriptor:

This unit deals with the skills and knowledge required for transporting physical resources within the work area. The candidate must be able to load and unload physical resources safely and efficiently, and transport the physical resources within the work area.

ELEMENTS**PERFORMANCE CRITERIA**

Candidates must be able to:

- | | | | |
|---|------------------------------------|-----|---|
| 1 | Load and unload physical resources | 1.1 | Wear appropriate personal protective equipment when transporting physical resources |
| | | 1.2 | Identify physical resources requiring transportation from supervisor's instructions |
| | | 1.3 | Undertake lifting and climbing operations according to industry procedures |
| | | 1.4 | Use lifting equipment for moving heavy and bulky items in accordance with supervisor's instructions and industry procedures |
| | | 1.5 | Position and secure physical resources in a manner which protects them from damage and contamination while preventing injury to self and others |
| | | 1.6 | Maintain and store lifting equipment according to organizational procedures |
| 2 | Transport physical resources | 2.1 | Operate transportation equipment in accordance with supervisor's instructions and industry requirements |
| | | 2.2 | Transport physical resources to the assigned location, using the appropriate manoeuvres to minimize damage |
| | | 2.3 | Monitor the condition of physical resources during transit |
| | | 2.4 | Maintain and store transportation equipment according to organizational procedures |

RANGE STATEMENT

Personal protective equipment includes:

- coveralls
- steel-tip boots
- gloves
- helmet
- goggles

Physical resources and includes:

- products
- equipment
- materials/supplies
- liquids

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. how to identify appropriate products and equipment for transportation
2. what are the safe lifting techniques and how to correctly use lifting equipment
3. how to undertake safe lifting and climbing operations
4. what are the techniques for securing products and equipment in transit
5. what are the health and safety requirements of the task
6. what are the limits on responsibility when loading, unloading and transporting physical resources
7. when to use different lifting techniques

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include the ability to:

- load and unload physical resources safely
- undertake lifting and climbing operations according to industry procedures
- protect physical resources from damage
- transport physical resources to the assigned locations
- maintain and store equipment according to organizational procedures
- operate lifting and transportation equipment according to supervisor's instructions and industry requirements

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit must be assessed on the job. The competencies covered by this unit would be demonstrated by an individual working as part of a team. The assessment environment should not disadvantage the candidate.

AG00700

Prepare Land for Planting

Unit Descriptor:

This unit deals with the skills and knowledge required to prepare land for planting. It describes the work expectations associated with preparing to use manual and mechanical aids, implementing soil conditioning measures and completing environmental maintenance tasks.

ELEMENTS**PERFORMANCE CRITERIA**

Candidates must be able to:

1	Prepare for using mechanical and manual aids	1.1	Wear suitable personal protective equipment when working
		1.2	Select and check appropriate hand tools for the task to be completed to ensure they are in good working condition
		1.3	Check equipment to be used following manufacturer's instructions
2	Implement soil conditioning measures	2.1	Select appropriate soil conditioning treatment according to supervisor's instructions
		2.2	Transport soil conditioner to the area to be treated and add to soil as instructed by supervisor
		2.3	Carry out basic field operations following workplace procedures
3	Complete environmental maintenance tasks	3.1	Dispose of non-toxic waste and works debris according to good agricultural practices
		3.2	Remove debris and carry out manual excavations as instructed by supervisor
		3.3	Implement erosion control measures as instructed by supervisor
		3.4	Control weeds as instructed by the supervisor
		3.5	Report all problems to the supervisor according to workplace procedures

RANGE STATEMENT

Protective clothing and equipment include:

- headgear
- eye protector
- ear protector
- respirator
- dust mask
- long sleeved shirts and pants
- gloves
- boots

Equipment includes:

- hand and power tools
- fencing equipment

Basic field operations include:

- land clearing, spraying, forking
- stumping, chopping, digging
- ploughing
- seedbed preparation

Manually constructed excavations include:

- post holes
- pits and ponds
- trenches
- compost pit or heap
- drains

Materials include:

- fuels and oils
- maintenance supplies

Legislation, codes and national standards relevant to the workplace include:

- OSH 2004
- hygiene requirements
- first aid requirements
- good agricultural practices (GAP)

Soil conditioning treatment includes:

- limestone
- manure
- fertilizer
- chemical additives

Non-toxic waste includes:

- fuel containers
- cardboard and degradable containers
- some packaging materials
- faulty and worn-out parts

Erosion control measures include:

- terracing
- contour cropping
- channel drains
- check dams
- strip cropping
- mulching and gully basins
- erosion control blankets

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. What is the relevance of OSH 2004 legislation
2. Why is it important to prepare land for planting
3. How to prepare the seedbed and seed boxes
4. What are the procedures for excavating post holes, small pits, trenches, compost pit or heap, drains
5. What are the basic erosion control measures including: terracing, contour cropping, channel drains, check dams, strip cropping, mulching

6. What are the different types of soil
7. What is the composition and properties of soil
8. What are the different types of soil conditioners
9. What are the procedures for applying soil conditioner
10. What are the activities related to land preparation
11. How to prepare land for planting
12. How to prepare compost
13. How to sterilize soil
14. How to construct and fill/pack a compost heap/pit
15. What are the different ways of controlling weeds

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- perform requirements of land preparation efficiently
- undertake appropriate measures to protect the soil from erosion
- dispose of non-toxic waste and works debris according to workplace standards

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be gathered through a variety of ways including direct observation, supervisor's reports, project work, practical demonstration of tasks and functions and oral questioning.

Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to a suitable venue and all materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

AG00701

Plant Trees and Shrubs

Unit Descriptor:

This unit deals with the skills and knowledge required to plant ornamental trees and shrubs. It describes the work expectations associated with preparing a planting site, preparing the planting hole, preparing trees and shrubs and installing trees and shrubs.

ELEMENTS**PERFORMANCE CRITERIA**

Candidates must be able to:

1	Prepare planting site	1.1	Wear suitable personal protective equipment when working
		1.2	Mark site according to planting plan and/or supervisor's instructions
		1.3	Prepare tools and equipment according to supervisor's instructions and use according to manufacturers guidelines
		1.4	Control competing plants according to supervisor's instructions
		1.5	Modify soil according to the cultural requirements of the trees to be planted
2	Prepare planting hole	2.1	Select planting spot and remove impediments by prescribed methods
		2.2	Dig planting holes to sufficient size and depth as instructed by supervisor
		2.3	Add selected soil conditioners as instructed by supervisor
3	Prepare trees and shrubs for planting	3.1	Water trees and shrubs prior to planting to ensure entire root ball is damp
		3.2	Remove trees and shrubs from containers without damage to shoot or root, following prescribed methods
		3.3	Loosen bound roots and trim damaged or broken roots using prescribed methods
4	Install trees and shrubs	4.1	Place tree or shrub firmly in hole, according to supervisor's instructions
		4.2	Fill planting hole with soil free from large lumps and stones and compact, according to prescribed methods
		4.3	Water tree or shrub with sufficient volume, where appropriate
		4.4	Secure trees and shrubs with stakes as directed by the supervisor

- 4.5 Prune trees and shrubs as required, according to workplace procedures
- 4.6 Label trees and shrubs as directed by supervisor
- 4.7 Clean, maintain and store tools and equipment following manufacturer's guidelines and workplace procedures

RANGE STATEMENT

Protective clothing and equipment includes:

- headgear
- eye protector
- ear protector
- respirator
- dust mask
- long sleeved shirts and pants
- gloves
- boots

Legislation, codes, guidelines and national standards relevant to the workplace include:

- OSH 2004
- hygiene requirements
- first aid requirements
- good agricultural practices (GAP)

Plant support systems include:

- tying
- staking
- bracing
- anchoring
- guying and installation of tree guards and protective materials

Equipment includes:

- spades/garden hoe/ rakes/ pickaxe/ shovels/spading fork
- spray equipment
- secateurs
- wheel barrow
- augers
- trailers

Pruning includes:

- removal of dead or damaged materials
- foliage reduction

Trees and shrubs include:

- container grown
- tube grown
- bare rooted plants

Soil conditioners include:

- limestone
- manure
- fertilizer
- chemical additives

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. What are the methods of installing trees and shrubs
2. What are the factors affecting the timing of tree or shrub planting
3. What are the reasons for and methods of pruning
4. What are the causes of injury/damage to trees at planting time

5. What are the initial establishment needs of juvenile plants
6. What are the principles relating to the application of soil conditioners and fertilizers
7. What is the importance of labeling plants in the field
8. How to label plants in the field
9. How to prepare a planting site
10. How to prepare planting hole
11. How to stake /guy newly planted trees
12. How to prune trees and shrubs
13. How to apply safe work practices
14. How to measure planting distances

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- prepare a planting site and planting hole
- prepare trees and shrubs for planting
- plant trees and shrubs
- apply labeling techniques on trees and shrubs

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be gathered through a variety of ways including direct observation, supervisor's reports, project work, practical demonstration of tasks and functions and oral questioning.

Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to a suitable venue and all materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

AG00702

Maintain Planted Area

Unit Descriptor:

This unit describes the provision of basic maintenance of a planted area. It describes the work expectations associated with installing crop support components, caring for growing plants, assembling irrigation systems, watering and weeding plants, controlling pests and diseases and cleaning tools, equipment and the workplace.

ELEMENTS**PERFORMANCE CRITERIA**

Candidates must be able to:

1	Install crop support components	1.1	Wear suitable personal protective equipment when working
		1.2	Select tools appropriate for the task and use according to manufacturer's guidelines
		1.3	Install supports according supervisors' instructions
		1.4	Employ construction methods in accordance with plans and specifications
2	Care for growing plants	2.1	Carry out plant treatments carefully according to workplace procedures
		2.2	Adjust and/or repair crop support components according to supervisors' instructions
		2.3	Apply fertilizer at rates specified by supervisor
		2.4	Carry out weed control measures in accordance with the crop and soil requirements
		2.5	Carry out soil cultivation measures in accordance with crop and soil requirements
3	Assemble irrigation system	3.1	Obtain irrigation components according to supervisors' directions
		3.2	Assemble irrigation components to pump according to manufacturer's recommendations
		3.3	Connect and test the system according to industry recommendations
4	Water established plants	4.1	Apply water to plants at the rate and volume defined by supervisor

		4.2	Turn off and secure irrigation pump according to workplace procedures
5	Weed planted area	5.1	Identify and control weeds according to instructions from supervisor
		5.2	Dispose of weeds according to good agricultural practices
6	Control pests and diseases	6.1	Identify dead, diseased and damaged plants and report to supervisor
		6.2	Implement pest and disease control measures according to supervisor's instructions
7	Clean tools, equipment and workplace	7.1	Sort and remove debris according to workplace procedures
		7.2	Clean tools and equipment according to maintenance schedule
		7.3	Store tools and equipment according to workplace guidelines

RANGE STATEMENT

Protective clothing and equipment includes:

- headgear
- eye protector
- ear protector
- respirator
- dust mask
- long sleeved shirts and pants
- gloves
- boots

Legislation, codes, guidelines and national standards relevant to the workplace include:

- OSH 2004
- hygiene requirements
- first aid requirements
- good agricultural practices (GAP)

Plants include:

- cereals
- legumes
- forage
- root crops
- fruit crops
- condiments and spices
- beverage
- non timber forest products

Tools and equipment used includes:

- hoses
- buckets
- spades/forks/rakes/ hoes/brooms
- knives/cutlass/secateurs
- wheelbarrows
- spray can
- brush cutters
- motorized blowers

- timber

- irrigation pumps

Basic maintenance includes:

- brush cut
- weeding
- watering
- mulch and mould plants
- fertilize plants
- control pests and diseases

Disposal of waste include:

- composting
- bagging and removal
- burying
- burning

Support components include:

- stake
- brace
- trellis

Weed control measures:

- physical
- chemical
- mechanical

Soil cultivation measures include:

- primary tillage
- secondary tillage

Pest and disease control measures include:

- physical
- chemical
- integrated pest management

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. What are the key activities involved in maintaining a planted area
2. Why is it important to control weeds
3. What are the different methods of controlling weeds
4. What are the advantages of Integrated pest management
5. How to determine when plants are lacking water
6. How to maintain and use equipment
7. What are the different methods of irrigating plants
8. What are the types of fertilizers
9. What are the different techniques in applying fertilizer
10. How to identify and control pest and diseases
11. What are the symptoms associated with common pests and diseases
12. What are the pest and disease control methods
13. How to install crop support components
14. How to care for growing plants
15. How to assemble irrigation systems and components
16. Why is it important to clean tools and equipment
17. How to clean tools and equipment

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- use methods and procedures for maintaining plants according to good agricultural practices

- install crop support components
- care for growing plants
- irrigate established plants appropriately
- control weeds without damage to plants
- clean tools, equipment and workplace

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence may be gathered through a variety of ways including direct observation, supervisor's reports, project work, practical demonstration of tasks and functions and oral and written questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to a suitable venue and all materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

AG00703

Support Crop Harvesting

Unit Descriptor:

This unit deals with the skills and knowledge required to support crop harvesting. It describes the work expectations associated with preparing for harvesting crops, harvesting crops, applying field handling procedures, grading and packing harvested produce and performing field sanitation.

ELEMENTS

Candidates must be able to:

PERFORMANCE CRITERIA

1	Prepare for harvesting crops	1.1	Wear suitable personal protective equipment when working
		1.2	Identify location of plot to be harvested following supervisor's instructions
		1.3	Select tools, equipment and containers for harvesting crops
2	Harvest crop	2.1	Check that crop selected for harvesting conforms to workplace standards for maturity
		2.2	Distribute containers at strategic locations throughout the field, following supervisor's instructions
		2.3	Carry out harvesting procedures according to industry guidelines
		2.4	Pack containers to specifications to avoid damage during transport
		2.5	Report any problems encountered according to workplace procedures
3	Apply field handling procedures	3.1	Store packed containers in cool place, following industry practices
		3.2	Stack packed containers to minimize damage to produce, following industry practices
		3.3	Transport containers to packing/grading stations according to workplace procedures
4	Grade and pack harvested produce	4.1	Wash, sort and grade produce according to workplace policy and industry standards
		4.2	Select and prepare appropriate containers for the packaging of the produce, following workplace procedures
		4.3	Pack products to prevent bruise/damage, according to workplace requirements

- | | | |
|---|--------------------------|--|
| | 4.4 | Label containers according to workplace procedures |
| | 4.5 | Move and stack containers following supervisor's instructions |
| 5 | Perform field sanitation | |
| | 5.1 | Collect unwanted plant material to maintain field sanitation according to workplace procedures |
| | 5.2 | Dispose of unwanted plant material according to good agricultural practices |
| | 5.3 | Report suspected problems to supervisor according to workplace procedures |

RANGE STATEMENT

Protective clothing and equipment includes:

- headgear
- eye protector
- dust mask
- long sleeved shirts and pants
- gloves
- boots

Workplace guidelines include:

- handling techniques
- grades of crop required
- harvesting procedures
- hygiene standards
- use of chemical standards
- crop selection criteria

Crops include:

- cereals
- legumes
- forage
- root crops
- fruit crops
- condiments and spices
- beverage
- non timber forest products
- timber

Problems include:

- equipment failure
- pests
- diseases
- unhealthy plants
- improper handling techniques

Legislation, guidelines and standards relevant to the workplace include:

- OSH 2004
- hygiene requirements
- first aid requirements
- good agricultural practices (GAP)

Harvesting equipment and supplies include:

- secateurs
- knives
- containers (bags, trays, boxes & bulk bin, baskets, buckets)
- ladders
- picking poles

Harvesting and post harvesting procedures include:

- equipment usage
- selection criteria
- grading and packaging
- taking due care of produce
- storing criteria

- produce not conforming to industry standards
- adverse weather conditions
- injury/accidents

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. How to identify the harvesting stage of different crops
2. How to determine crop maturity
3. What are the different methods of harvesting crops
4. What are the problems resulting from harvesting early or late in the day
5. What are the methods used to remove field heat
6. What are the harvesting techniques for specific crops
7. What are the packing techniques for various crops
8. What are the grading and sorting techniques
9. What are the various types of packaging containers
10. How to sort and grade produce
11. How to maintain hygiene of produce
12. How to package, stack and store produce
13. How to dispose of unwanted material

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- recognize the optimum time of harvest for a crop
- determine maturity of crop
- apply efficient harvesting techniques following industry guidelines
- grade, pack and stack produce
- perform field sanitation

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic.

Evidence may be gathered through a variety of ways including direct observation, supervisor's reports, project work, practical demonstration of tasks and functions and oral and written questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to a suitable venue and all materials and documentation required. The candidate must be permitted to refer to

any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

AG00226: Maintain Selected Equipment

Unit Descriptor:

This unit deals with the skills and knowledge required for the maintenance of equipment. It describes the work expectations associated with preparing selected equipment for maintenance and applying specified maintenance procedures.

ELEMENTS

PERFORMANCE CRITERIA

Candidates must be able to:

- | | | | |
|---|--|-----|---|
| 1 | Prepare selected equipment for maintenance | 1.1 | Wear suitable personal protective equipment when working |
| | | 1.2 | Identify and select equipment for maintenance, in accordance with supervisor's instructions |
| | | 1.3 | Read monitoring devices on equipment accurately, when applicable |
| | | 1.4 | Obtain the necessary hand tools and materials for the required maintenance work following supervisor's instructions |
| | | 1.5 | Complete the preparation of equipment for maintenance in accordance with supervisor's instructions |
| 2 | Apply specified maintenance procedures | 2.1 | Maintain equipment in accordance with manufacturer's instructions |
| | | 2.2 | Clean and store tools and equipment according to established workplace procedures |
| | | 2.3 | Dispose of waste according to regulatory procedures |
| | | 2.4 | Refer any problems to the supervisor |

RANGE STATEMENT

Personal protective equipment include:

- coveralls/coats
- boots/closed shoes
- gloves

Materials include:

- lubricating oil
- grease
- degreaser

- helmet
- goggles
- emery paper

Tools and equipment include:

- hand tools
- knapsack sprayer
- brush-cutter
- edger/trimmer
- lawn mower
- motorised sprayer
- mist blower

Regulatory procedures includes:

- safe disposal of solid wastes
- disposal of biodegradable materials
- OSH Act

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. how to select the types of hand tools and materials necessary for the job
2. how to correctly use hand tools and materials
3. what types of protective clothing must be worn
4. how to clean and store tools and equipment
5. who is responsible for the different types of maintenance for tools and equipment
6. how to recognize when maintenance is required

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include the ability to:

- read monitoring devices on equipment accurately, when applicable
- prepare equipment for maintenance as instructed
- maintain equipment according to manufacturer's instructions
- clean and store tools and equipment according to established procedures
- dispose of waste according to regulatory procedures

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

AG00551

Use Hazardous Substances Safely

Unit Descriptor:

This unit deals with the skills and knowledge required to handle and use hazardous substances in the workplace. It describes the work expectations associated with handling, storing, transporting and using hazardous substances.

ELEMENTS		PERFORMANCE CRITERIA	
Candidates must be able to:			
1	Handle hazardous substances	1.1	Identify specific hazardous substance from the label
		1.2	Handle selected hazardous substance in safe containers or packages under instructions from supervisor
2	Store hazardous substances	2.1	Verify storage requirements for hazardous substances for compliance with industry standards
		2.2	Store hazardous substances according to supervisor's instructions
3	Transport hazardous substances	3.1	Identify transport mode and procedures in accordance with supervisor's instructions
		3.2	Load or decant hazardous substances into secure containers or packaging as directed by supervisor
		3.3	Secure and seal load to ensure safety and to eliminate spillage according to workplace procedures
		3.4	Complete transport of hazardous substances in line with established procedures and advise supervisor of movements according to workplace procedures
4	Use hazardous substances	4.1	Select and use personal protective equipment suited to the task
		4.2	Remove selected hazardous substance from storage and utilize in accordance with the label instructions and workplace requirements
		4.3	Dispose of containers and unused hazardous substances in accordance with workplace procedures
5	Act in emergency situations related to hazardous	5.1	Notify supervisor of emergency incident following workplace procedures

substances

- 5.2 Carry out emergency actions using appropriate equipment and materials as directed by supervisor

RANGE STATEMENT

Protective clothing and equipment include:

- headgear
- eye protector
- ear protector
- respirator
- dust mask
- long sleeved shirts and pants
- gloves
- boots

Legislation, guidelines and national standards relevant to the workplace include:

- OSH Act 2004
- hygiene requirements
- first aid requirements

Handling and using hazardous substances include:

- spraying
- dusting
- use of application equipment
- decanting liquids
- refueling
- transport and cartage

Hazardous substances include:

- fuels and oils
- fumigants
- pesticides and weedicides
- baits
- alkaline and caustic substances
- acids
- detergents & wetting agents
- fertilizers

Industry standard storage conditions include:

- security systems
- elevated storage
- fans and ventilation
- drainage systems
- separation of incompatible materials
- caution signs
- workplace notices
- bunds

Emergency situations include:

- spilt fuels or other substances
- incorrect use of substances
- fire
- contact with skin or eyes
- leaking or damaged containers
- explosion
- mixing of incompatible materials
- contamination of water supplies
- inhalation of toxic fumes

Emergency equipment and materials include:

- eye wash/bath
- emergency shower
- spill absorption materials
- fire retardants/extinguishers
- decanting equipment
- communication devices

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. What are the relevant Occupational Safety & Health (OSH) rules and regulations for the handling and use of hazardous substances in the workplace
2. What are the various types of hazardous substances in the workplace
3. What are the caution symbols used for hazardous substances
4. What are the storage and transportation requirements for various categories of hazardous substances
5. What are the procedures for using hazardous substances in the workplace
6. How to read and interpret manufacturer's labels
7. What are the potential emergency situations with hazardous substances in the workplace
8. How to respond in an emergency situation

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- identify hazardous substances from the label
- use prescribed methods and procedures when handling, storing and using hazardous substances in the workplace, in the appropriate context
- transport hazardous substances safely
- carry out emergency actions using appropriate equipment and materials as directed by supervisor

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence may be gathered through a variety of ways including direct observation, supervisor's reports, project work, practical demonstration of tasks and functions and oral questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to a suitable venue and all materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

AG00704

Implement Pest and Disease Control Measures

Unit Descriptor:

This unit deals with the skills and knowledge required to implement pest and disease control measures on farms, gardens, plant nurseries, shops and other farm merchandise enterprises. It describes the work expectations associated with identifying pest and disease infestation, preparing equipment for controlling pests and disease, carrying out pest and disease treatment and carrying out post treatment procedures.

ELEMENTS		PERFORMANCE CRITERIA	
Candidates must be able to:			
1	Identify pest and disease infestation	1.1	Identify evidence of pest and disease infestation by visual inspection
		1.2	Assess severity or extent of infestation and damage following industry procedures
		1.3	Report pest and disease infestation and damage following workplace procedures
2	Prepare equipment	2.1	Carry out checks of pest and disease control equipment to ensure good working condition according to manufacturer's specifications
		2.2	Select personal protective equipment/clothing according to industry/workplace requirements
3	Carry out pest and disease treatment	3.1	Use tools and equipment according to supervisor's instructions
		3.2	Prepare treatments and administer according to supervisor's instructions and manufacturer's guidelines
		3.3	Employ safeguards to ensure that targeted pest and disease are controlled and other species remain unharmed following workplace procedures
4	Carry out post treatment procedures	4.1	Dispose of contaminated biological material according to supervisor's instructions
		4.2	Dispose of empty containers according to industry requirements
		4.3	Clean tools and equipment in accordance manufacturer's specifications
		4.4	Remove used personal protective equipment and treat according to workplace procedures
		4.5	Apply personal decontamination procedures following workplace standards

RANGE STATEMENT

Personal protective clothing and equipment include:

- headgear
- eye protector
- ear protector
- respirator
- dust mask
- long sleeved shirts and pants
- plastic apron
- gloves
- boots

Prevention/ control measures include:

- insecticides and fungicides
- poisons and baits
- biologically active agents
- growth regulators
- mechanical means including shooting

Evidence of pests and disease include:

- scratches/bites/holes/discholoration/rots/tunneling
- eggs/larvae
- cobweb
- mold/mildew
- wilts
- water soaked
- cankers/cracks/lesions
- droppings
- deformed fruits

Legislation, guidelines and national standards relevant to the workplace include:

- OSH Act 2004
- hygiene requirements
- first aid requirements

Common pests or disease include:

- fungus
- insects
- weeds
- rodents
- birds
- bacteria
- virus
- nematodes
- mammals

Equipment includes:

- spray can/knap sack sprayer
- mist blower/motorized sprayers
- sling shot

UNDERPINNING KNOWLEDGE & SKILLS

Candidates must know:

1. What are the relevant OSH issues
2. What are the basic first aid procedures
3. What are the common pests affecting plants
4. What are the common diseases affecting plants
5. What are the cultural control techniques, chemical control and non chemical control measures
6. What are the manufacturer's instructions related to the handling of chemical control equipment
7. How to identify evidence of pest and disease infestation
8. How are PPE used during chemical applications

9. What are the post treatment procedures

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Evidence should include a demonstrated ability to:

- identify evidence of harmful pest and diseases in plants
- apply pest and disease control measures according to supervisor's instructions
- select PPE and equipment for pest and disease control
- carry out post treatment procedures

(2) Method of Assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence may be gathered through a variety of ways including direct observation, supervisor's reports, project work, practical demonstration of tasks and functions and oral questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to a suitable venue and all materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

(3) Context of Assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.