

PRODUCE VEGETABLES

UNIT CODE: HO/OS/HP/CR/10/3/B

UNIT DESCRIPTION

This unit specifies the competencies required to participate in production of quality vegetable crops which include exotic, indigenous and Asian vegetables. It involves applying food safety measures in land preparation, establishment, management, harvest and post-harvest handling of vegetables, and keeping accurate records.

ELEMENTS AND PERFORMANCE CRITERIA

| ELEMENT | PERFORMANCE CRITERIA |
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| <p>These describe the key outcomes which make up workplace function.</p> | <p>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></p> |
| <p>1. Apply food safety measures in producing vegetables</p> | <p>1.1 <i>Exotic and indigenous</i> vegetable garden is established and maintained according to recommended <i>agronomic practices</i> and instructions given. 1.2 Possible <i>sources of food safety hazards</i> are identified and documented as per instruction 1.3 <i>Food safety procedures</i> are followed in producing vegetables 1.4 Standard operating procedures for preventing and mitigating food safety risks are implemented as per the identified food safety risks</p> |
| <p>2. Prepare to produce vegetables</p> | <p>2.1 <i>Tools, equipment, materials and supplies</i> are assembled based on the requirements of the job 2.2 <i>Occupational safety and health procedures</i> are adhered to according workplace procedures 2.3 Soil for analysis is sampled as per <i>soil sampling procedure</i> and instructions given. 2.4 Land for <i>vegetables</i> production is prepared according with instructions given. 2.5 Vegetable <i>production structures</i> are constructed according to vegetable production manual and instructions given.</p> |
| <p>3. Produce vegetables</p> | <p>3.1 Nutrients are applied to the vegetable plants based on the soil analysis report and instructions given. 3.2 Diseases and pests are managed as per the instructions given</p> |
| <p>4. Complete production of vegetables</p> | <p>4.1 Vegetables are harvested in accordance with the instructions given. 4.2 <i>Post-harvest handling</i> of vegetables is carried out as instructed</p> |

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| | 4.3 Vegetable production records are kept as per instructions 4.4 Waste disposal is undertaken in accordance with instructions given. |
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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 |
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| 1. Exotic vegetable may include but not limited to: | Types: <ul style="list-style-type: none"> • Cole crops: cabbage, kales, broccoli, and cauliflower: • Solanaceae: tomato, Irish potato, capsicum: • Legumes: French beans, garden peas: • Root: onions; carrots: • Others: Sweet corn, lettuce, spinach, asparagus, cucumber, melons, squash. |
| 2. Indigenous and Asian vegetables may include but not limited to: | Types: <ul style="list-style-type: none"> • Eggplant/ brinjals • capsicums • okra, • karella • moringa • black nightshade • Spider weed • amaranth • cowpeas • pumpkin • crotalaria |
| 3. Sources of food safety hazards may include but not limited to: | <ul style="list-style-type: none"> • Water • Growing media • Site • Agro-chemicals • Organic and inorganic fertilizer |
| 4. Food safety procedures may include but not limited to | <ul style="list-style-type: none"> • Hand washing • PPE • Personal hygiene • Clean as you go |
| 5. Tools may include but not limited to: | <ul style="list-style-type: none"> • Hoes • Machetes • Secateurs |

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| | <ul style="list-style-type: none"> • Shovels • Soil augur • Panga • Pegs • Hammer • Bucket • Dibbler |
| 6. Equipment may include but not limited to: | <ul style="list-style-type: none"> • Spray pumps • Watering cans • Hose pipes • Plough • Harrows • Ridger • Boom sprayer • Wire strainer • Traps • Pipe sprinklers • Scouting flags • Storage tanks • Tractors • Bud count square • Meteorological equipment |
| 7. Materials and supplies may include but not limited to: | <ul style="list-style-type: none"> • Seedlings /planting materials • Pesticides • Herbicides • Pheromones • Fertilizers • Staking sticks • Nails • Khaki paper bags size 3 • Stationery • Manures • Measuring tape • Layout string • Shade nets • Translucent papers • Planting pots • Fencing wire |
| 8. Occupational safety and health procedure may include but not limited to: | <p>The practices to manage hazards from:</p> <ul style="list-style-type: none"> • Fire • Use of tools • Chemical contamination and poisoning |

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| 9. Soil sampling procedure may include but not limited to: | The process of: <ul style="list-style-type: none"> • soil collection, • packaging • labeling • submission soils for analysis |
| 10. Production structures may include but not limited to: | <ul style="list-style-type: none"> • High tunnels • Green houses • Screen houses |
| 11. Harvest and post-harvest handling may include but not limited to: | <ul style="list-style-type: none"> • Removal of edible crop parts (e.g. leaves, stems, roots tubers, bulbs, combs) from the plant • Basic cooling • Cleaning • Transporting • Sorting and grading • Weighing |

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:

- Record keeping
- Basic hygiene
- Tilling
- Measuring
- Leveling
- Gaping
- Pruning
- Spraying
- Produce handling
- Soil sampling
- Basic numeracy
- Communication

Required knowledge

The individual needs to demonstrate knowledge of:

- Basic food hygiene practices
- Record keeping
- Basic vegetable garden establishment and management
- Basic tools and equipment used of vegetable production
- Basic soil sampling
- Basic soil conservation
- Basic agronomic practices in vegetable production

- Vegetable production structures and support systems
- Basic maturity indices for vegetable production
- Harvesting and post harvesting handling of vegetables
- Basic production records
- Basic waste disposal
- Occupational safety and health

EVIDENCE GUIDE

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

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| 1. Critical Aspects of Competency | <p>Assessment requires evidence that the candidate:</p> <p>1.1 Prepared planting land depending on the type of vegetable as instructed.</p> <p>1.2 Established and maintained the vegetable garden according to recommended <i>agronomic practices</i> and instructions given.</p> <p>1.3 Harvested and carried out post-harvest handling practices based on the type of vegetable as instructed.</p> <p>1.4 Observed safety measures by using Personal Protective Equipment (PPE) and correct tools as per the instructions</p> <p>1.5 Observed food safety procedures as per instructions</p> <p>1.6 Documented food safety records as per instructions</p> |
| 2. Resource Implications | <p>The following resources must be provided during assessment:</p> <p>2.1 Access to relevant workplace where assessment can take place</p> <p>2.2 Appropriately simulated environment where assessment can take place</p> <p>2.3 Materials relevant to the proposed activity or tasks</p> <p>Ornamental plants production manual</p> |
| 3. Methods of Assessment | <p>Competency may be assessed through:</p> <p>3.1 Observation</p> <p>3.2 Oral questioning</p> <p>3.3 Interviews</p> <p>3.4 Third party report</p> |
| 4. Context of Assessment | <p>Competency may be assessed:</p> <p>4.1 Off-the-job</p> <p>4.2 On-the-job</p> <p>4.3 Work placement -attachment</p> |
| 5. Guidance information for assessment | <p>This section describes the skills and knowledge required for this unit of competency.</p> |