

## PRODUCE MUSHROOMS

**UNIT CODE:** HO/OS/HP/CR/05/3/B

### UNIT DESCRIPTION

This unit specifies the competencies required to participate in production of mushrooms. It includes applying food safety measures in preparing mushroom production structures, managing and harvesting the mushrooms and carrying out post-harvest handling of mushrooms.

### ELEMENTS AND PERFORMANCE CRITERIA

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
<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. <b><i>Bold and italicized terms are elaborated in the range.</i></b></p>
<p>1. Apply food safety measures in producing mushrooms</p>	<p>1.1 The type of <b><i>mushroom</i></b> to be established is determined in accordance with market demand and instructions given</p> <p>1.2 Standard operating procedures for preventing and mitigating food safety risks are implemented as per the identified food safety risks</p> <p>1.3 <b><i>Food safety procedures</i></b> are followed in producing mushrooms</p> <p>1.4 Possible <b><i>sources of food safety hazards</i></b> are identified and documented as per instruction</p>
<p>2. Prepare to produce mushroom</p>	<p>2.1 The <b><i>mushroom house</i></b> is sited according to farm plans and instructions given.</p> <p>2.2 <b><i>Tools, equipment, materials and supplies</i></b> are identified and sourced based on the requirements of the job</p> <p>2.3 The mushroom house is constructed depending on MoALF production guidelines and instructions given.</p>
<p>3. Produce mushroom</p>	<p>3.1 The starter culture is put in place based on MoALF production guidelines and instructions given.</p> <p>3.2 Established mushrooms are managed as per MoALF production guidelines and instructions given.</p> <p>3.3 Established mushroom are protected from pests and diseases as per MoALF production guidelines and instructions given.</p> <p>3.4 Established mushroom are harvested as per production guidelines and instructions given.</p>
<p>4. Complete production of mushrooms</p>	<p>4.1 Post-harvest handling of the mushrooms is carried out as per MoALF production manual and instructions given.</p> <p>4.2 Waste management is undertaken in accordance with Environmental Management and Coordination Act (EMCA) and instructions given.</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
1. Mushroom may include but not limited to:	<ul style="list-style-type: none"><li>• Oyster,</li><li>• shiitake and</li><li>• white button</li></ul>
2. Food safety procedures may include but not limited to	<ul style="list-style-type: none"><li>• Hand washing</li><li>• Use of PPE</li><li>• Judicious use of agro inputs</li><li>• Personal hygiene</li><li>• Clean as you go</li></ul>
3. Sources of food safety hazards may include but not limited to:	<ul style="list-style-type: none"><li>• Water</li><li>• Growing media</li><li>• Site</li><li>• Organic and inorganic fertilizer</li></ul>
4. Food safety hazards may include but not limited to:	<ul style="list-style-type: none"><li>• Chemicals<ul style="list-style-type: none"><li>• Heavy metals</li><li>• Pesticides</li><li>• Mycotoxins (Aflatoxin)</li></ul></li><li>• Biological</li><li>• Physical</li></ul>
5. Mushroom houses may include but not limited to:	<ul style="list-style-type: none"><li>• Mushroom House</li><li>• Shelves</li><li>• Plastic Bags</li><li>• Heat Oven</li></ul>
6. Tools may include but not limited to:	<ul style="list-style-type: none"><li>• Weighing scale</li></ul>
7. Materials may include but not limited to:	<ul style="list-style-type: none"><li>• Poly tubes</li><li>• Lockable drum</li><li>• Table spoon</li><li>• Sisal twines</li><li>• Supplement –soya bean meal</li><li>• Plant residues –stalks and bran</li><li>• Polythene bags</li><li>• Shelves</li><li>• Shade</li><li>• Spawn</li><li>• Water</li><li>• Substrate</li></ul>

8. Equipment may include but not limited to:	<ul style="list-style-type: none"> <li>• PPE –hand gloves, dust coat, dust masks</li> <li>• Hand spray equipment</li> <li>• Oven</li> <li>• Basin</li> </ul>
9. Materials and supplies may include but are not limited to:	<ul style="list-style-type: none"> <li>• Methylated spirit</li> <li>• Lime</li> <li>• Fuel for heating substrate</li> <li>• Molasses</li> <li>• Sisal twine</li> <li>• Soap</li> </ul>

## 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
- 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:

- Basic food hygiene practices
- Record keeping
- Agro Ecological Zonation
- Mushroom production structure Management
- Types of mushrooms
- Physiology of mushrooms
- Types of tools and equipment used in production of mushrooms
- Sourcing/Procurement Procedures (I.E. Seedlings, Supplies)
- Accounting principles
- Mushrooms production Terminologies

- Mushroom production Technologies
- Occupational Safety and Health Procedures
- Controlling Pests and Diseases in mushrooms
- Soil Testing
- Regulations and Standards of establishing mushroom production structures
- Waste Management
- Determining mushroom maturity
- Harvesting and Post Harvesting Handling of mushrooms
- General management of mushroom 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.

<p>1. Critical Aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Prepared growing structures to a level suitable to the planting material as instructed.</p> <p>1.2 Observed safety measures by using Personal Protective Equipment (PPE) and correct tools</p> <p>1.3 Followed required process of producing mushrooms as instructed</p> <p>1.4 Efficiently used the inputs</p> <p>1.5 Harvested mushrooms and carried out post-harvest handling of mushrooms as instructed.</p> <p>1.6 Observed food safety procedures as per instructions</p> <p>1.7 Documented food safety records as per instructions</p>
<p>2. Resource Implications for competence assessment</p>	<p>The following should be provided:</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>2.1 Materials relevant to the proposed activity or tasks</p>
<p>3. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <p>3.1 Observation</p> <p>3.2 Written tests</p> <p>3.3 Oral questioning</p> <p>3.4 Third party reports</p>
<p>4. Context of Assessment</p>	<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> <p>Off the job assessment must be undertaken in a closely simulated workplace environment.</p>

5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.
--	--

easytvvet.com