



Australian Government

AHCPHT407 Manage mushroom crop development

Release: 1

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Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to manage mushroom crop development, including the selection, application and management of the mushroom casing and all activities up to the end of the harvesting period.

It applies to individuals who analyse information and exercise judgement to complete a range of advanced skilled activities and demonstrate deep knowledge in a specific technical area. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems. All work is carried out to comply with workplace procedures.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Production horticulture (PHT)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Manage casing application	1.1 Select casing materials and recipe 1.2 Assess condition and quality of spawn run before casing 1.3 Where supplement is to be added to substrate at casing, product and its rate of application are selected and instructions are given to appropriate personnel 1.4 Check casing mixture is checked against farm standards for

Element	Performance criteria
	moisture, structure and depth, and remedial action is taken if required
2. Control environment during casing colonisation growth phase	2.1 Crop is installed in growing room according to farm procedures 2.2 Air conditioning system in the growing room is set up and checked for correct functioning 2.3 Temperature, relative humidity and carbon dioxide content are measured, recorded, and where required, adjusted 2.4 Mycelium growth is assessed and decisions are made on the timing and quantity of water to be applied 2.5 Pest and disease status is monitored and recorded and, where required, remedial action is taken
3. Initiate fruit body formation and manage pinning and pre-picking growth phases	3.1 Assess growth and make changes to temperature and ventilation to initiate fruit body formation according to farm procedures 3.2 Record and adjust temperature, relative humidity and carbon dioxide content 3.3 Identify and analyse variations from expected or required ranges of temperature, relative humidity and carbon dioxide content and take appropriate remedial action 3.4 Assess mycelium development and pin development and determine timing and quantity of water and additives to be applied to water 3.5 Monitor and record pest and disease status and take remedial action where required
4. Assess crop maturity, flush development and quality, and monitor the harvesting process	4.1 Assess crop maturity to determine when and what to pick 4.2 Instruct pickers about tasks to be performed 4.3 Monitor picking results to ensure instructions continue to be appropriate and are being carried out 4.4 Consult markets to ensure product meets market needs and specifications 4.5 Monitor crop quality, recognise disorders stimulated by environmental conditions and implement remedial action if required 4.6 Monitor and record pest and disease status during this stage and take remedial action where required 4.7 Plan daily work schedule for waterers and coordinate picking and watering schedules 4.8 Review harvest process for compliance with quality standards and identify, document and implement areas for improvement where appropriate 4.9 Provide feedback to pickers on individual and team performance

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCPTH407A Manage mushroom crop development.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCPTH407 Manage mushroom crop development

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Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- develop work schedules
- maintain environment within parameters for production
- monitor and manage growing room conditions, watering and flush development of mushroom crops
- identify stages of growth and development, and factors impacting on yields and mushroom quality
- identify the interdependency of stages of growth and impact of early stages of production cycle on production results

Knowledge Evidence

The candidate must demonstrate knowledge of:

- principles and practices of mushroom crop development
 - available options of additives to irrigation water to promote mushroom quality and the main considerations of their use
 - basic understanding of air conditioning principles, particularly relative humidity
 - casing function, application and depth and surface structure requirements
 - desirable physical, biological and chemical characteristics of casing
 - farm standards and procedures, including those relating to OHS, food safety, Hazard Analysis Critical Control Point (HACCP), quality systems, emergency procedures, organisational structure and workplace communication channels and protocols
 - goals and sub-stages of Phase II substrate preparation and impact of Phase II on yields and quality

- growth phases of a mushroom crop and interactions that occur between the compost, casing, environmental factors (such as temperature, water, relative humidity and carbon dioxide) and growth of the mushroom
- how nature of casing and the appearance and quantity of mycelium growth in casing affect the number, distribution and quality of fruit bodies formed
- impact of mushroom numbers and size on picking and quality
- industry and workplace awards and conditions
- management impacts of supplementing at spawning or casing
- management requirements of casing - Compost Added at Casing (CAC) and/or Casing Inoculums (CI)
- OHS and environmental legislation, industry codes of practice and enterprise procedures
- overview of Phase I substrate production and its impact on yields and quality
- site quarantine protocols

Assessment Conditions

Assessors must satisfy current standards for RTOs.

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