



Australian Government

AHCPHT405 Manage mushroom substrate preparation

Release: 1

AHCPTH405 Manage mushroom substrate preparation

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 substrate preparation.

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. Confirm status of system requirements for mushroom substrate preparation	1.1 Determine details of quantities of substrate required and dates/times to be achieved for each process stage and communicate to personnel 1.2 Determine availability, quality, serviceability, and cleanliness of all rooms, work areas, machinery, equipment and materials for mushroom substrate preparation 1.3 Allocate staff duties and responsibilities

Element	Performance criteria
	1.4 Follow site quarantine protocols and farm and personal hygiene requirements
2. Confirm quality and consistency of Phase II outputs	2.1 Ensure Phase II process conforms to required production schedule and farm procedures 2.2 Record key factors and critical points 2.3 Take random samples of end product and dispatch for analysis 2.4 Record test results, compare to standards and take remedial action
3. Monitor and manipulate spawning and spawn run	3.1 Assess condition and quality of compost before spawning and take remedial action 3.2 Take temperature readings and record and adjust if required 3.3 Measure, record and control carbon dioxide content 3.4 Monitor spawn growth and appearance of mycelium during spawn run period 3.5 Select product and its rate of application where supplement is to be added to substrate at spawning 3.6 Monitor room hygiene and occurrence of pests and diseases and implement control measures
4. Manage clean-up procedure	4.1 Manage clean-up activities at the end of each process stage 4.2 Conduct cook-out or chemical disinfestations treatment before removal of spent substrate 4.3 Return equipment and hand tools to storage area after cleaning, basic preventative maintenance and checking for future serviceability 4.4 Report faults to maintenance personnel 4.5 Complete workplace records

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 AHCPHT405A Manage mushroom substrate preparation.

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 AHCPTH405 Manage mushroom substrate preparation

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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:

- establish and review farm procedures for mushroom substrate preparation
- monitor and manipulate all interactions between inputs, conditions and outputs for each stage of substrate process
- set and monitor productivity standards for mushroom substrate and rest of production cycle
- record and analyse production data

Knowledge Evidence

The candidate must demonstrate knowledge of:

- principles and practices for managing mushroom casing production
 - casing function, application, required depth and required surface structure
 - detailed knowledge of all stages in Phase II substrate preparation process
 - 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
 - how mushrooms are grown, with a focus on interaction between compost, environmental factors (such as temperature, water, relative humidity, carbon dioxide and ammonia) and mushroom growth
 - industry and workplace awards and conditions
 - key parameters to be recorded and monitored and appropriate ranges in relation to temperature, ammonia, relative humidity, moisture content, carbon dioxide and time
 - overview of mushroom production cycle and possible impact of deviations from farm standards on substrate and rest of production cycle
 - overview of Phase I compost production

- relevant legislation and industry codes of practice and quality

Assessment Conditions

Assessors must satisfy current standards for RTOs.

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