



Australian Government

AHCPCM501 Diagnose plant health problems

Release: 1

AHCPCM501 Diagnose plant health problems

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to diagnose plant health problems.

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

Plants culture and management (PCM)

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. Monitor factors that influence plant health	1.1 Identify the plant species to the lowest taxonomic level and state its region of origin 1.2 Determine the seasonal growth stages of the plant 1.3 Record the day-to-day cultural practices used on each horticultural species 1.4 Determine the characteristics of the growing environment that affect the growth of a specific plant species

Element	Performance criteria
	1.5 Record climatic data and environmental growing conditions 1.6 Record the presence or numbers of beneficial organisms
2. Diagnose plant health problems	2.1 Identify environmental and cultural factors that predispose plants to attack by pests and diseases 2.2 Identify the symptoms and signs of plant health problems using accepted nomenclature 2.3 Assess the severity and extent of the problem in a plant species 2.4 Compare observations with published data, historical records and own experience 2.5 Determine the possible causes of the plant health problem 2.6 Consult with specialist services in severe, complex or rapid onset cases 2.7 Sample plant or soil specimens and dispatch for specialist diagnosis or laboratory testing where required 2.8 Record plant disorders and problems and document in a report
3. Remedy plant health problems	3.1 Formulate a weed, pest and disease control program, taking into account the Integrated Pest Management (IPM) strategy and production plan 3.2 Identify a range of modifications to growing conditions for a specific situation or plant species to rectify plant health problems 3.3 Identify resources, tools, equipment and machinery required for work activities, analyse the costs and benefits and confirm availability with suppliers, contractors and appropriate personnel 3.4 Identify work health and safety hazards associated with work activities, assess risks and implement controls
4. Evaluate treatment program	4.1 Monitor plants during treatment 4.2 Record appropriate data 4.3 Compare observations to expected results 4.4 Recommend modifications to the treatment program are to client or management 4.5 Present treatment program report to client or management

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 AHCPCM501A Diagnose plant health problems.

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 AHPCPM501 Diagnose plant health problems

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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:

- research information about plant health problems, their diagnosis and remedial treatments
- differentiate between pest, disease and nutrient-associated symptoms
- identify signs and symptoms of plant health problems
- assess the severity, extent and speed of onset of health problems in a specific situation
- determine possible causes of the problem
- liaise with specialist services, clients and management
- formulate a weed, pest and disease control program
- implement treatment programs to remedy the diagnosed health problems
- evaluate treatment program and recommend modifications

Knowledge Evidence

The candidate must demonstrate knowledge of:

- principles and practices of plant health
 - chemical use, toxicity and compatibility with target plants, growth media, and environmental characteristics of the horticultural region
 - chemical, cultural and biological control methods included in the integrated pest management (IPM) strategy of the enterprise
 - enterprise and industry record keeping and reporting policies and requirements
 - evaluation procedures, including cost/benefit analysis, for plant and growth media treatments in relation to plant health, enterprise budget and performance targets
 - plant anatomy, morphology, physiology, histology, pathology, taxonomy and nomenclature
 - plant nutrition issues associated with the growth media used and horticultural region for specific plant species

- sustainable horticultural practices relevant to the enterprise or horticultural region
- taxonomic descriptions, horticultural function, cultural and growth requirements, and target growth and performance characteristics of specific horticultural plants for the achievement of enterprise production and business plans
- weeds, pests and disease detection methods, taxonomic identification, life cycle stages and characteristic symptoms for the specific horticultural plants of the enterprise

Assessment Conditions

Assessors must satisfy current standards for RTOs.

Links

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