AHCARB602 Diagnose tree diseases

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 diagnose tree diseases including diseases of palms and other woody monocotyledons.

This unit applies to individuals with broad theoretical and technical knowledge of a specific area or a broad field of work and learning and cognitive, technical and communication skills to demonstrate autonomy, judgement and defined responsibility in undertaking complex work within broad parameters to provide specialist advice and functions.

The role involves the self-directed application of specialised knowledge in arboriculture with substantial depth in areas such as with substantial depth in areas such as disease diagnostics and disease classification and management.

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

Arboriculture (ARB)

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. Assess environmental impact	1.1 Identify the tree and determine its region of origin 1.2 Determine seasonal growth stages of the tree 1.3 Ascertain current and past cultural practices 1.4 Determine characteristics of growing environment affecting growth of specific tree species

Element	Performance criteria
	1.5 Identify environmental and cultural factors predisposing tree to disease
	1.6 Determine and assess relevant physical and chemical properties of the soil or growing media
2. Identify diseased trees	2.1 Determine impact of disease type on tree parts and systems
	2.2 Use industry standard terminology to describe disease attributes in relation to tree anatomy, physiology, pathology and taxonomy
	2.3 Develop a glossary of disease terminology
	2.4 Consider natural defence systems of trees against major disease types
	2.5 Determine disease groups according to a disease classification guide
	2.6 Interpret signs and symptoms of disease to identify which trees are diseased
3. Diagnose tree disease	3.1 Record symptoms and signs of disease using accepted nomenclature
	3.2 Collate samples and evidence into a reference collection
	3.3 Determine disease type according to a disease classification guide
	3.4 Determine identification of macro biotic disease to family level
	3.5 Prepare specimens of microbiotic diseases for microscopic examination
	3.6 Collect, package and dispatch specimens for specialist diagnosis or laboratory testing where required
4. Provide a prognosis	4.1 Determine the current health and energy reserves of the tree
	4.2 Assess the severity and extent of the disease
	4.3 Research the virulence of the disease on the specific host
	4.4 Determine the phenology of the host and the disease
	4.5 Research and consider the lag time of management options
	4.6 Consider influences of environmental conditions on host, disease and management options
	4.7 Provide an informed prognosis in writing and verbally
5. Develop, document and monitor the management program	5.1 Research management options such as Integrated Pest management (IPM) and recommend appropriate options
	5.2 Develop a disease management program within IPM guidelines
	5.3 Record and document tree diseases and management programs in a report
	5.4 Monitor management plans and modify or refine as needed

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 AHCARB503 Diagnose tree diseases.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72