

Prerequisite competency completion		
Not applicable. There are no prerequisite requirements.		
Required reports completion		
Has the candidate successfully completed the required reports ?	Yes/No (Y/N)	Signed (Initialled)
Disease management plan		
Disease reference collection		
Glossary of disease terminology		
Disease profile form		
Mandatory Equipment (as a minimum)		
Has each of the mandatory equipment items been used to gather evidence for assessment?	Yes/No (Y/N)	Signed (Initialled)
computer		
word processing software		
internet connection		
digital camera with macro		
diagnostic tools including sounding hammer, trowel, probe, cordless drill		
soil testing equipment		
basic digital dissection microscope 10–100x		
compound microscope		
microtome, staining and slide mounting equipment		
slides and coverslips		
temporary/permanent mountant		
histochemical stains		
trees without diseases		
trees with biotic diseases		
trees with abiotic diseases		
suitable cross-sections of defects and diseases		
Knowledge Evidence		
Has the candidate successfully completed the Knowledge Evidence requirements by demonstrating knowledge of each of the line items below?	Yes/No (Y/N)	Signed (Initialled)

Industry Partners:



Diseases		
examination of signs and symptoms		
disease symptoms and signs:		
– effect of disease on trees		
– assessment of dead tips		
– assessment of excessive numbers of dead branches		
– examination of roots, root crown, stem, branches and canopy for signs of biotic disease		
examination of roots, root crown, stem, branches and canopy for signs of abiotic disease		
recognising and recording wounds to the tree		
accepted nomenclature of diseases		
identification of signs and symptoms of tree health problems		
disease theory		
pathology:		
– tree pathology		
– tree diseases		
causes of instability, decay, damage and stress in trees		
diagnoses of tree problems		
disease detection		
disease detection methods		
methods of detecting decay and structural defects in trees		
testing equipment to detect decay, disease and scope of tree problems		
preparation of specimens of microbiotic diseases for microscopic examination		
requirements for specialist diagnosis or laboratory testing		
disease classification		
disease groups		
disease classification guides		
taxonomic identification		
phenology:		
– life cycle stages		
– phenology of the host and the disease		
severity:		
– severity of the disease		
– extent of the disease		
virulence of the disease on the specific host		

Industry Partners:



patterns of host – disease interaction for each major disease type		
influences of environmental conditions on host and disease		
disease management		
prognosis:		
– providing an informed prognosis in writing and verbally		
– methods of providing a reasoned prognosis		
disease management programs		
Integrated Pest Management strategy:		
– chemical, cultural and biological control methods as part of an Integrated Pest Management strategy		
influences of environmental conditions on management options		
lag time of management options		
monitoring and modification of management plans		
disease treatment		
research tree health problems, diagnoses and remedial treatments		
chemical use		
toxicity and compatibility with target trees		
toxicity and compatibility with environmental characteristics of the horticultural region		
report writing		
industry standard terminology		
compiling a disease reference collection		
disease attributes in relation to tree anatomy, physiology, pathology and taxonomy		
documentation of tree diseases and management programs		
glossary of disease terminology		
Performance evidence		
Has the candidate successfully demonstrated the Performance Evidence requirements of the unit of competency AHCARB602 Diagnose tree diseases, and as per listed line items below?	Yes/No (Y/N)	Signed (Initialled)
identifying the tree and determining its region of origin		
determining seasonal growth stages of the tree		
ascertaining current and past cultural practices		
determining characteristics of the growing environment affecting the growth of a specific tree species		
identifying environmental and cultural factors that predispose the tree to disease		
determining and assessing the relevant physical and chemical properties of the soil or growing media		

Industry Partners:



determining impact of disease type on tree parts and systems		
use of industry standard terminology to describe disease aspects of tree anatomy, physiology, pathology and taxonomy		
developing a glossary of disease terminology		
considering natural defence systems of trees against major disease types		
determining disease groups according to a disease classification guide		
interpreting signs and symptoms of disease to identify which trees are diseased		
recording symptoms and signs of disease using accepted nomenclature		
collating samples and evidence into a reference collection		
determining disease type according to a disease classification guide		
determining identification of macrobiotic disease to family level		
preparing specimens for microscopic examination of microbotic diseases		
collecting, package and dispatch specimens for specialist diagnosis or laboratory testing where required		
determining current health and energy reserves of the tree		
assessing severity and extent of the disease		
researching virulence of the disease on the specific host		
determining phenology of the host and the disease		
researching and considering lag time of management options		
considering influences of environmental conditions on host, disease and management options		
providing an informed prognosis in writing and verbally		
researching management options such as Integrated Pest Management (IPM) and recommending appropriate options		
developing a disease management program within IPM guidelines		
recording and documenting tree diseases and management programs in a report		
monitoring management plans and modifying or refining as needed		
compiling a disease reference collection		
use of industry standard terminology to describe disease aspects of tree anatomy, physiology, pathology and taxonomy		

Industry Partners:



<p>Assessment conditions</p> <p>It is an industry requirement for competency that assessment of the disease reference collection incorporates a minimum of sixty (60) diseases, including biotic and abiotic diseases, from a variety of kingdoms, orders and families.</p> <p>The collection may be digital and/or physical, correctly labelled and containing the information listed in the AQF 5B Disease profile sheet, including a minimum of one (1) image of the disease taken by the candidate. Candidates must record the</p> <ul style="list-style-type: none"> • location, • date that the image was taken, and • the host tree species, <p>and images must provide sufficient quality of information to aid in disease identification.</p>		
Have the assessments incorporated the assessment conditions and met the industry requirements for competency in this unit as per listed line items below?	Yes/No (Y/N)	Signed (Initialled)
Have the assessments incorporated a minimum of sixty (60) disease profiles to be completed?		
Have the assessments confirmed that the disease reference collection contains biotic and abiotic diseases from a variety of kingdoms, orders and families?		
Have the assessments confirmed a minimum of one (1) image of the disease taken by the candidate recording the		
<ul style="list-style-type: none"> • location, • date that the image was taken, and • the host tree species, <p>with sufficient quality of information to aid in disease identification?</p>		
<p>The candidate must be observed diagnosing and recording diseases of trees, and developing, monitoring and documenting a report on a tree disease management plan.</p>		
Has the candidate met the performance requirements as per listed line items below?	Yes/No (Y/N)	Signed (Initialled)
Has the candidate been observed diagnosing and recording diseases of trees for the purposes of the assessment?		
Has the candidate been observed developing, monitoring and documenting a report on a tree disease management plan?		
<p>Assessment may be conducted in a simulated or real work environment; however, determination of competency requires the application of work practices under work conditions.</p>		
Have assessments been demonstrated consistently over time?		
Have assessments been demonstrated in a suitable range of contexts?		
Have assessments been demonstrated with a productivity-based outcome?		

Industry Partners:



Have assessments been demonstrated with multiple assessment events and reports?			
Assessor Declaration			
Assessors must satisfy current standards for RTOs in the assessment of arboriculture units of competency.		Yes/No (Y/N)	Signed (Initialled)
Has assessment been conducted only by persons who have:			
<ul style="list-style-type: none"> • arboriculture vocational competencies at least to the level being assessed? 			
<ul style="list-style-type: none"> • current arboriculture industry skills directly relevant to the unit of competency being assessed? 			
Assessor name	Assessor qualification	Year	Full Signature
Competency Determination			
This section determines the skills and knowledge required to diagnose tree diseases including diseases of palms and other woody monocotyledons.			Competent /Not yet competent
The candidate is competent in diagnosing tree diseases including diseases of palms and other woody monocotyledons.			
Competency Assessment Completion			
Assessor name	Date	Full Signature	

Industry Partners:

