

Specification of Competency Standards
for the Arboriculture & Horticulture Industry
Unit of Competency

Functional Area - Diagnosis and Treatment of Pests and Diseases

Title	Diagnose biotic disorders of plants
Code	109125L4
Range	This unit of competency is applicable to technical personnel who are engaged in diagnosis of plant problems in the arboriculture and horticulture industry. Practitioners should be capable of mastering the methods for diagnosing biotic plant disorders, as well as analysing the causes of the biotic disorders of the target plants through detailed observation and inspection.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Possess knowledge related to diagnosing biotic disorders of plants</p> <ul style="list-style-type: none"> • Comprehend the common plant species • Comprehend the types of pathogenic organisms and their attack patterns • Comprehend the methods for diagnosing biotic plant disorders • Familiarise with the use of diagnostic tools and equipment • Comprehend the types of biotic plant disorders and their symptoms and signs • Comprehend the transmission media and cycles of pathogenic organisms • Comprehend the causes of plant disorders and the biotic factors that affect the growth and health of plants • Familiarise with the workflow and technical requirements of sample collection and delivery <p>2. Diagnose biotic disorders of plants</p> <ul style="list-style-type: none"> • Identify the species of the infected plants • Look for a pattern of abnormality in the infected plants and check for the symptoms and signs • Identify the types of pathogenic organisms attached to the infected plants through visual inspection or auxiliary equipment • Examine the living environment of the infected plants on-site and collect the environmental data • Examine the health conditions of the infected plants and the dispersion of the pathogenic organisms • Collect plant, pathogenic organism or soil samples and send them to the laboratory for testing when necessary • Analyse the causes of the plant disorders and the biotic factors that affect the growth and health of the infected plants based on the symptoms and signs of the infected plants, testing of the pathogenic organism samples and environmental factors • Diagnose the types of biotic disorders of the infected plants based on the analysis results <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> • During the diagnosis process, take the initiative to inspect the surrounding plants to observe the dispersion of the pathogenic organisms
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> • Able to identify the species of the target plants and their symptoms and signs to figure out the causes of the plant disorders;

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	<ul style="list-style-type: none">• Able to identify the types of the pathogenic organisms and their attack patterns in order to find out the biotic factors that affect the growth and health of the target plants; and• Able to analyse the causes of the plant disorders based on the data collected, so as to make diagnoses.
Remark	