

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

Functional Area - Diagnosis and Treatment of Pests and Diseases

Title	Develop work plans for pest control by means of physical and chemical methods
Code	109130L5
Range	This unit of competency is applicable to managers or technical personnel who are engaged in pest control in the arboriculture and horticulture industry. Practitioners should be capable of mastering the physical and chemical methods for pest control, as well as developing corresponding work plans for pest control after having the health conditions of plants and types of pests inspected on-site.
Level	5
Credit	4 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Possess knowledge related to developing work plans for pest control by means of physical and chemical methods</p> <ul style="list-style-type: none"> <li>• Comprehend the types, characteristics, causes, infection cycles and modes of transmission of common plant pest problems</li> <li>• Comprehend the characteristics, measures to be taken and impact on the environment of the physical and chemical means of pest control</li> <li>• Comprehend the species, properties and health conditions of the target plants</li> <li>• Comprehend the feeding methods and types of mouthparts of common pests</li> <li>• Possess knowledge of plant entomology and toxicology</li> <li>• Familiarise with the use of the equipment and tools related to pest control operations</li> <li>• Comprehend the government legislation and regulations related to pest control operations</li> </ul> <p>2. Develop work plans for pest control by means of physical and chemical methods</p> <ul style="list-style-type: none"> <li>• Conduct site visits to inspect the health conditions of the target plants</li> <li>• Observe the signs of the target plants and the damage caused by the pests</li> <li>• Collect pest samples to analyse their feeding methods and types of mouthparts</li> <li>• Analyse the health problems caused by the pests on the target plants based on the inspection results and the pest samples</li> <li>• Choose to use physical or chemical control methods to treat the pest problems based on the analysis results</li> <li>• Develop the workflow, guidelines and safety codes for pest control projects</li> <li>• Set the work schedules, work objectives and quality objectives of work processes for the pest control projects</li> <li>• Plan corresponding manpower and resource allocation with regard to the area the pest control operations cover, the number of plants affected by pests and the number of pests</li> <li>• Develop monitoring and assessment mechanisms for the projects to ensure the work quality</li> </ul> <p>3. Exhibit professionalism</p> <ul style="list-style-type: none"> <li>• Adopt pest control methods that have a lower impact on the environment to maintain ecological balance</li> </ul>
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> <li>• Able to identify the signs of the target plants to analyse the health problems caused by the pests on the target plants with reference to the pest samples collected;</li> </ul>

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	<ul style="list-style-type: none"><li>• Able to choose suitable pest control methods based on the analysis results and develop corresponding work plans; and</li><li>• Able to develop monitoring and assessment mechanisms for the projects to ensure that the work progress and quality meet the contract requirements.</li></ul>
Remark	