



Australian Government

Assessment Requirements for AHCPER325 Mitigate plant pests, diseases and disorders in a permaculture system

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 9.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has implemented prevention and control programs to mitigate the effects of pests, diseases and disorders on a permaculture system and has:

- identified potential pests, diseases and disorders and their preferred conditions for a permaculture system
- identified and monitored beneficial organisms for prevention and control of pests, diseases and disorders
- developed prevention and control programs for pests, diseases and disorders
- monitored conditions conducive to pests, diseases and disorders, including:
 - soil moisture
 - weather conditions
 - nutrients
- monitored permaculture system and identified pests, diseases and disorders and the tolerable threshold for each
- implemented a pest, disease and disorder prevention program, and monitored impact on other permaculture elements
- investigated methods of managing pests, diseases and disorders in a permaculture system
- recognised when tolerable threshold has been exceeded for infestation/infection
- implemented control program according to organic and permaculture standards
- maintained records and formulated patterns of pest and disease control operations for updating prevention and control programs, which must include:
 - pest disease or disorder name, type and cause
 - weather/environmental conditions conducive for development
 - date and actions taken in prevention and control program activity
 - infection/infestation thresholds for plants in the permaculture system.
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Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- permaculture and organic principles and practices related to managing plant pests, diseases and disorders
- principles of maintaining healthy crops in a permaculture system, including:
 - companion planting
 - increasing diversity
 - providing habitat and food for pests' natural predators
 - healthy, balanced soil
 - planting for insectivorous birds, lizards, frogs and microbats
 - minimal use of soluble fertilisers
- permaculture and organic systems control methods, including:
 - deterrent organic sprays
 - pheromone traps and lures
 - biological controls using predatory, parasitic insects and mites
 - nutrient additives
 - companion planting
 - crop rotation and succession planting
 - covers and netting
 - *Bacillus thuringiensis* (BT) and other action-specific microorganisms
- common pests, diseases and disorders affecting plants in a permaculture system, including:
 - symptoms of disease and disorders
 - soil conditions, weather and environmental conditions supporting infection/infestation
 - common names
 - infestation/infection threshold affecting produce
 - stages of development of pest organisms and signs of pest presence on plants and animals
 - fungal, bacterial and viral infestations and their symptoms
 - disease vectors and plants that harbor them
- preventing and controlling pests, diseases and disorders in enclosed environments, including:
 - greenhouses and shade house
 - closed canopy
 - manipulating microclimate
- workplace health and safety policies and procedures
- biosecurity procedures to prevent transferring infections/infestations in the system
- importance of record-keeping to build understanding of pests and disease development, prevention and control.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated on an operational permaculture system or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - reference materials
 - tools and equipment
 - recording systems
 - treatments and biological agents
- specifications:
 - workplace procedures and processes
 - safety data sheets
 - specifications for infestation/infection threshold
 - specific organic and permaculture standards.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>