



Australian Government

Department of Education, Employment and Workplace Relations

FDFWGG3012A Monitor and control vine disorders and damage

Release: 2

FDFWGG3012A Monitor and control vine disorders and damage

Modification History

This unit supersedes and is equivalent to FDFWGGVDDDB Monitor and control vine disorders and damage.

April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This specialist unit has been developed for the wine grape growing stream of the wine sector. This unit covers the skills and knowledge required to identify and monitor a variety of vine disorders and causes of damage, and recommend and implement preventive or corrective action.
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Application of the Unit

Application of the unit	The application of this unit involves consultation with the manager and may require supervision of others in the implementation process.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Monitor vine health	1.1 Vineyard is monitored according to workplace procedures 1.2 Evidence of vine disorders and pest or disease presence is recognised 1.3 Cause of symptoms is identified 1.4 Appropriate activities are identified and recommended
2. Implement control measures	2.1 Resources are coordinated and personnel briefed to deliver requirements as required 2.2 Agreed control measures are implemented according to instructions
3. Evaluate effectiveness of control activities	3.1 Vineyard is monitored to evaluate the effectiveness of treatment
4. Record information	4.1 Workplace information is recorded in the appropriate format

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- access workplace information to identify vine damage monitoring and control requirements
- implement integrated pest management (IPM) program
- select, fit and use appropriate personal protective clothing and/or equipment
- liaise with other work areas
- apply sampling techniques
- conduct routine tests
- monitor vine health to meet workplace requirements
- recognise symptoms of vine disorders and identify their cause
- recognise and monitor beneficial organisms
- recommend preventive, corrective and/or eradication measures
- evaluate effectiveness of a range of control measures
- implement appropriate preventive, control and/or eradication measures
- rectify and/or report environmental non-compliance
- maintain workplace records
- implement occupational health and safety (OHS) procedures
- instruct and/or supervise vineyard personnel and/or contractors according to enterprise procedures
- operate information technology systems according to enterprise procedures
- use oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce.

Required knowledge includes:

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- symptoms of vineyard pests, diseases, disorders and weeds, and their treatment
- effect of pests, diseases, disorders and weeds on vine, fruit and/or wine quality
- effect of prevention, control and eradication techniques on vine, fruit and/or wine quality (e.g. withholding periods for chemical sprays and inter-row cultivation)
- basic vine physiology, as it applies to:
 - water intake

- nutrient uptake
- photosynthesis
- respiration, transpiration
- translocation
- parts of the root, trunk, shoot and fruit systems of the grapevine, their role in how the vine works and their contribution to fruit quality, including:
 - buds, nodes and tendrils
 - cambium, epidermis, phloem and xylem
 - leaf blade, bract and petiole
 - bunch, berries and flowers
- annual growth stages of grapevines, including:
 - budburst
 - flowering
 - veraison
 - maturity
- vine types, their characteristics and uses, including:
 - family, genus and species
 - *Vitis vinifera* and commercial varieties
 - native species and hybrids (e.g. *labrusca*)
 - rootstocks and scion stock
- key grape varieties and their distinguishing features. This may include factors, such as:
 - berry and bunch characteristics
 - frost and disease resistance
 - flavour and style
- industry processes for new variety development
- Climatic implications and influence on the occurrence, development and treatment of vine disorders and damage
- resistance management strategies
- features and benefits of a variety of preventive, control and eradication techniques, including costs and interaction with environmental conditions
- environmental issues associated with preventive, control and eradication techniques. This should include awareness of community issues and concerns (e.g. spray drift)
- IPM principles, features and benefits
- sampling techniques and procedures
- routine testing techniques and procedures
- monitoring techniques and procedures
- OHS hazards and control requirements
- legislative and licensing requirements relevant to the task
- prevention, control and eradication implementation procedures
- evaluation techniques
- procedures and responsibility for reporting problems

- reporting and recording requirements and procedures
- supervision techniques where relevant
- information technology systems where relevant.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • use personal protective equipment, MSDS and follow other specified OHS procedures • recognise symptoms of vine disorders and damage and recommend treatment • implement treatments according to requirements • evaluate effectiveness of treatments • complete documentation.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • personal protective clothing and equipment as required • work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements • instructions, information, specifications and schedules as required • equipment, services and corresponding information as required • products and materials as required • internal and external customers and suppliers as required • cleaning procedures, materials and equipment as required • documentation and recording requirements and procedures
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competence should be demonstrated on more than one occasion over

EVIDENCE GUIDE

	a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.
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Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures

Work is carried out in accordance with workplace procedures, licensing requirements and legislative requirements

Workplace information

Workplace information can include:

- Standard Operating Procedures (SOPs)
- specifications
- production schedules
- instructions
- routine maintenance schedules
- work notes
- Material Safety Data Sheets (MSDS)
- manufacturer instructions
- product labels
- IPM programs
- verbal directions from manager or supervisor

Vine disorders

Vine disorders may include:

- any form of damage or deficiency caused by physical, environmental, biological or chemical agents (e.g. vertebrate and invertebrate pests, diseases, weeds, fungi and nutrient deficiency)

Control or eradication measures

Control or eradication measures may include:

- the application of growth regulants, nutrients, hormones, pesticides, fungicides and herbicides
- other chemicals, baits, traps, ripping, fumigation,

RANGE STATEMENT	
	guns, guards, fencing, gas guns and other scaring devices
Equipment	Equipment will vary according to the techniques adopted
Information systems	Information systems may be: print or screen based and may include information technology systems, such as a database of vine disorder and damage histories, symptom recognition and treatment information, climatic, weather forecasting and rainfall mapping systems, work scheduling, reporting and recording systems
Work hazards	Work may involve exposure of self and/or other personnel to: chemical, dangerous or hazardous substances

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Unit Sector(s)

Unit sector	Wine operations
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