



Australian Government

FDFWGG2010A Field graft vines

Release: 2

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Modification History

This unit supersedes and is equivalent to FDFWGGFGVB Field graft vines.

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 select appropriate vine material and field graft vines.
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Application of the Unit

Application of the unit	This unit applies to work conducted in the field to select and prepare vines for grafting and complete grafting activities. It includes application of treatment as required.
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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. Prepare to field graft vines	1.1 Materials are confirmed and available to meet grafting requirements 1.2 Vine material is selected and prepared for grafting 1.3 Equipment is checked to confirm readiness for use
2. Field graft vines	2.1 Vines are field grafted according to instructions 2.2 Vine graft is treated and taped according to instructions 2.3 Grafting process and equipment are monitored to ensure results are maintained within specifications 2.4 Out-of-specification process and equipment performance are identified, rectified and/or reported
3. Complete field grafting activities	3.1 Equipment is cleaned as required 3.2 Unused grafting material is disposed of or stored according to workplace procedures 3.3 Waste generated by both the grafting and cleaning procedures is collected, treated, disposed of or recycled according to workplace procedures 3.4 Work is conducted in accordance with workplace environmental guidelines 3.5 Required documentation is completed

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 grafting requirements
- select, fit and use appropriate personal protective clothing and/or equipment
- liaise with other work areas and customers
- confirm supply of necessary materials
- select appropriate vine material for grafting. This may include consideration of:
 - variety and clone
 - matching cambium
 - matching bevels and sizes
 - viable buds
 - achievement of tight unions
- prepare vine material for grafting. This may include:
 - soaking buds
 - working appropriate incisions
 - hot water treatment of cuttings
 - virus tests
 - compatibility tests
 - hydration of cuttings
 - cutting to size
- select and prepare equipment as required
- graft vines in the field according to instructions. This should include:
 - selecting appropriate bud location to graft
 - ensuring cohesion of graft union
- operate equipment safely
- treat vines after grafting. This may include:
 - applying fungicide
 - securing with tape
 - painting
 - waxing
- monitor the process and equipment operation to identify out-of-specification results or non-compliance. This may include monitoring:
 - percentage take
 - weather conditions

- pests and diseases (e.g. weevils)
- store unused grafting material
- take corrective action in response to out-of-specification results or non-compliance
- report and/or record corrective action as required
- sort, collect, treat, recycle or dispose of waste as required
- maintain work area to meet housekeeping standards
- Clean equipment after use
- identify, rectify and/or report environmental non-compliance
- conduct routine maintenance of equipment 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:

- purpose of grafting and various methods of budding and grafting
- criteria for successful grafting
- advantages of using clonal rootstock material
- criteria for selecting parent vines for scion material
- correct procedure and optimum conditions for the storage and handling of material until required for grafting
- advantages of using clonal and registered vine improvement material
- importance of selection and use of rootstock
- stages of the grafting procedure and their purpose
- common problems and corrective action required
- purpose, components and operation of grafting equipment
- methods of callusing vine cuttings and the criteria for best callus development
- procedures and responsibilities for reporting problems
- Occupational health and safety (OHS) hazards and controls
- environmental issues and controls
- cleaning requirements for work area and equipment
- recording requirements and procedures
- routine maintenance procedures for equipment 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: • select and prepare appropriate vine material for grafting, including disbudding • field graft vines to instructions • conduct post-grafting treatment and packing of vines • monitor grafted vines and identify and rectify or report out-of-specification grafted vines • follow personal and work area hygiene procedures • dispose of waste correctly • record and report results of grafting according to procedures.
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

EVIDENCE GUIDE

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

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 • verbal direction from manager, supervisor or senior operator
Grafting methods	Grafting methods may include: • T buds • chip • wedge • side bark
Equipment	Equipment may include:

RANGE STATEMENT	
	• secateurs • grafting knife
Grafting seals	Grafting seals may include: • tape • fungicides • paint • wax
Materials	Materials may include: • cuttings • buds • dormant or green material • nursery rootstock rootlings • mature vines for Vinifera varietal topworking
Information systems	Information systems may be: • print or screen based
Confirming equipment status	Confirming equipment status will include: • checking that safety standards and pre-start requirements are met and that equipment is operational
Work hazards	Work may involve exposure to: • chemical, dangerous or hazardous substances

Unit Sector(s)

Unit sector	Wine operations
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