



Australian Government

FWPNSY3006 Manage mother plants

Release: 1

FWPNSY3006 Manage mother plants

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to manage mother plants used in tree nurseries.

The unit applies to individuals working as arboriculture workers, farm forestry workers, forestry workers, nursery workers, plantation establishment workers, plantation forest officers and silviculturists who are involved in tree nursery operations.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Forest Nursery Production (NSY)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to manage mother plants	1.1 Determine job requirements from work order or instruction, and where required seek clarification from appropriate personnel 1.2 Confirm safety and environmental requirements, including use of personal protective equipment and safe chemical handling procedures, for the task according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify, assess and take actions to mitigate risks and hazards associated with managing mother trees 1.4 Identify emergency and evacuation procedures to follow in the event of an incident or accident 1.5 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace 1.6 Select tools, equipment and materials, and check for serviceability according to workplace procedures
2. Select mother plants	2.1 Identify characteristics of plants that are suitable for use as mother plants 2.2 Select plants for use as mother plants 2.3 Follow workplace procedures for establishment of mother plants 2.4 Classify mother plants according to types and varieties 2.5 Label mother plants according to workplace procedures
3. Maintain mother plants	3.1 Set lighting level to maintain plants in vegetative phase 3.2 Prune and train mother trees to maximise the number of healthy branches that can be trimmed to create clones 3.3 Manage tree canopies to avoid overcrowding and maintain light penetration 3.4 Water and fertilize mother plants according to workplace procedures and safety requirements 3.5 Test plant material for viruses and other organisms according to workplace procedures and safety requirements 3.6 Implement pest and insect control measures according to workplace procedures and safety requirements 3.7 Maintain records of mother plants
4. Replace mother plant	4.1 Assess strength of clones 4.2 Retire existing mother plants and replace with clones

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Extract information from industry guides and standard references on techniques for maintenance of mother plants
Writing	Complete workplace forms and plant labels
Oral communication	Ask open and closed questions and use active listening techniques to clarify contents of work orders
Numeracy	Apply basic arithmetic functions to complete records related to mother plant maintenance

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPNSY3006 Manage mother plants	Not applicable	The unit has been created to address a skill or task required by industry that is not covered by an existing unit	Newly created

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPNSY3006 Manage mother plants

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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 managed mother plants in a tree nursery.

In undertaking this activity, the individual has:

- confirmed safety and environmental requirements, including use of personal protective equipment (PPE) and safe chemical handling procedures
- identified one plant suitable for use as a mother plant using industry accepted criteria
- maintained one mother plant in a tree nursery
- maintained records of one mother plant according to workplace procedures
- determined the need to replace one existing mother plant
- retired one existing mother plant and replaced with clone.

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:

- uses of mother plants:
 - cloning
 - scion
 - rootstock
- advantages of creating clones:
 - size
 - quality
 - yield
 - shortening growing cycle
- genetic relationship between mother plants and clones
- life cycle of mother plants

- characteristics of plants suitable for use as mother plants:
 - strong roots
 - strong stem
 - resistant to pests and fungi
 - large harvest yield
 - steady easy maturation
 - premium example of species
 - free of disease
 - healthy and vigorous enough to withstand material donation
- maintenance requirements of mother plants:
 - lighting
 - pruning and training
 - managing tree canopy
 - watering
 - fertilising
 - testing plant material for viruses and other organisms
 - pest and insect control measures
- techniques and requirements for maintaining mother plants in pots
- reasons for keeping mother trees in vegetative state
- safe handling, use, storage and transport of chemicals
- hazards and risks associated with maintaining mother plants.

Assessment Conditions

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

- physical conditions:
 - skills must be demonstrated in a forest work environment or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - mother plant and clones
 - tools, equipment, materials and PPE required for work task
- specifications:
 - workplace health, safety and environmental policies and procedures applicable to tree nursery operations

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

Links

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