



Australian Government

Department of Education, Employment and Workplace Relations

RTF2013A Pot-on plants

Release: 1

RTF2013A Pot-on plants

Modification History

Not applicable.

Unit Descriptor

This competency standard covers the process of production of containerised nursery plants after propagation in production nurseries.

Competency is demonstrated by the application of knowledge and skills to a range of tasks involved in the potting-on process, such as the preparation of growing media, potting-up treatments, and nursery hygiene. The work is carried out within routine methods and procedures under supervision with intermittent checking. Responsibility for some roles and co-ordination within a team may be required.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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Element	Performance Criteria
1 Prepare for potting-on operations	1.1 Workplace information is interpreted and clarified according to instructions. 1.2 OHS hazards are identified and reported to the supervisor. 1.3 Tools and equipment for potting-on are selected and used according to enterprise guidelines. 1.4 Work area is cleaned and disinfected according to company hygiene practices. 1.5 Materials are collected and checked to ensure sufficient quantity and quality for potting-on operations.
2 Prepare growing media	2.1 Suitable personal protective equipment (PPE) is selected, used and maintained. 2.2 Media components are measured and mixed according to enterprise guidelines. 2.3 Growing media is tested to ensure the product complies with media specifications.
3 Pot-on propagated plants	3.1 Plants are prepared for potting in accordance with enterprise guidelines. 3.2 Plants are graded during the potting process according to quality specifications. 3.3 Soil level in pots is adjusted to produce a well-furnished plant according to supervisors instructions. 3.4 Placement and depth of plants comply with the planting method and plan. 3.5 Potting operations are carried out according to OHS requirements.

- 4 Complete potting-on operations
 - 4.1 Plants are watered in to eliminate air pockets and prevent dehydration.
 - 4.2 Cleaning procedures are performed and hygiene practices followed according to enterprise guidelines.
 - 4.3 **Waste** is collected and disposed of or recycled to minimise damage to the external environment.
 - 4.4 **Records** of potting-on operations are maintained in the appropriate format.

Required Skills and Knowledge

Not applicable.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in potting-on plants requires evidence that the trainee can prepare plants for potting-on, prepare the potting media, pot-on plants and provide the necessary after care.

The skills and knowledge required to pot-on plants must be **transferable** to a different work environment. For example, a trainee potting-on ornamental plants must be able to pot-on vines in a production nursery after an induction period.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

1. the uses and application of different types of potting media
2. basic plant physiology relevant to potting-on activities
3. enterprise plants and their characteristics
4. importance of hygiene and quality control when potting-on and handling potting media
5. tool care and use
6. common problems that may occur with potting-on plants in a controlled environment and their treatment
7. methods of disposing of waste to minimise damage to the external environment.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- 8. participate in teams and contribute to team objectives
- 9. read and interpret enterprise work procedures and maintain required records
- 10. measure out media components accurately.

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information (1)** be applied?

Ideas and information relating to plant potting-on activities and problems encountered should be discussed with other members of the work team and the supervisor.

2. How can **information be collected, analysed and organised (1)**?

Enterprise work procedures, such as a daily production schedule or potting plan, should be consulted, interpreted and applied to co-ordinate potting-on activities with further clarification sought from the supervisor where necessary.

3. How are **activities planned and organised (1)**?

Materials, tools, equipment and work activities for daily potting up routines may need to be arranged before work periods, and there may be some responsibility for co-ordinating work activities with other members of the work team.

4. How can **team work (1)** be applied?

Potting-on activities may involve working with other members of a team to complete operations within the daily work routine.

5. How can the use of **mathematical ideas and techniques (1)** be applied?

Mixing and testing media, measuring volumes, calibration, and counting, and tallying, may all require mathematical application.

6. How can **problem-solving skills (1)** be applied?

Problems relating to potting-on, tools and equipment, workplace safety and other team members may arise that require corrective action or consultation with the supervisor.

7. How can the **use of technology (1)** be applied?

Technology may be applied with the use of machines such as potting machines, soil mixing equipment, soil testing equipment and small tractors and trailers.

Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance and where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines**. Further advice may also be sought from the relevant **sector booklet**.

Range Statement

Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available

What **workplace information** may be relevant when undertaking potting-on operations?

Potting-on plan, Nursery Industry Accreditation Scheme, production statistics, Standard Operating Procedures (SOPs), specifications, work notes, Material Safety Data Sheets (MSDS), manufacturers instructions, product labels, or verbal directions from the manager, supervisor, or senior operator.

What **OHS hazards** may be identified in the work area?

OHS hazards may include use of hazardous substances, use of potting mix, manual handling, moving equipment, sharp hand tools, and slippery or uneven surfaces.

What **tools and equipment** may be required for potting-on activities?

Tools and equipment may include potting machine, secateurs, knives and other cutting instruments, pots and containers, bins, trailers, wheelbarrow, trolley, mechanical trolley, small tractors, shovel, trowel, plant supports, ties and rubbish bins.

What **hygiene practices** may be relevant to this standard?

Hygiene practices may include personal hygiene, removing and disposing of all media and organic waste from production surfaces, disinfecting production surfaces, tools and equipment; footbaths, access restrictions and handling practices, which minimise cross contamination.

What **personal protective equipment (PPE)** may be needed to carry out potting-on activities?

Personal protective clothing and equipment may include breathing apparatus, gloves, overalls, and boots.

What **media components** may be required for the preparation of growing media?

Media components may include sand, potting mix, gravel, gro-wool, sawdust, pine bark, perlite, vermiculite, foam, peat, amendments, nutrients, ameliorants, ash, rice hulls, sphagnum moss, and commercial mixes.

What **media specifications** might be relevant to this standard?

Media specifications may include pH, drainage, aeration, salinity and nitrate levels,

	and water repellence.
What propagated plants may require potting-on procedures?	Propagated plants may include established plants with developed root systems sown from seed, from cuttings, layering, growing on tissue cultured plants, division or splitting, spores, cloning, and budding or grafting.
How might plants be prepared for potting-on?	Preparation steps may include root trimming, thinning and spreading, and shoot trimming.
What criteria can be used to grade plants during the potting-on process?	Grading parameters may include size, health and potential.
What types of pots may be used during the potting-on process?	Pots may include cells, tubes, standard, squat, planter bags, and root trainers.
What OHS requirements apply to this standard?	OHS requirements may include identifying, assessing and reporting risks; working with hazardous substances such as potting mixes and organic matter, cleaning, maintaining and storing tools and equipment, appropriate use of personal protective equipment, safe operation of tools and equipment, correct manual handling, basic first aid; personal hygiene and reporting problems to supervisors.
What type of waste may be collected?	Waste may include left over media and components, pots and containers, and organic waste.
What records may be relevant to this standard?	Records may include number of plants potted-on, date, problems encountered, and batch number.
For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.	

Unit Sector(s)

Not applicable.