

U16102**Propagate plants from seed**

Unit Descriptor:

This unit describes the standards expected of anyone whose role it is to propagate plants from seed. You will be working in accordance with instructions from a supervisor or manager.

The first element covers the preparation of materials and the process of seed sowing. You should be aware of seed preparation methods such as: soaking, priming and stratification, but may not be directly involved in these operations. Growing media may be natural or artificial.

The second element covers the aftercare of the crop in the period from sowing to the end of the propagation phase. Aftercare may include the control of humidity, temperature and light, weed control and vermin control.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

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| 1. Prepare materials and sow seed | 1.1 | Maximise the success of the propagation operation through the correct timing or work activities. |
| | 1.2 | Use and maintain equipment in a safe and effective condition throughout. |
| | 1.3 | Obtain the required seed and growing materials in accordance with instructions. |
| | 1.4 | Prepare the growing medium in accordance with instructions. |
| | 1.5 | Handle seeds in a way which minimises damage. |
| | 1.6 | Evenly and accurately sow seed in accordance with instructions. |
| | 1.7 | Ensure working methods promote health and safety, and are consistent with relevant legislation and codes of practice. |

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| 2. Provide aftercare for seedlings | 2.1 | Recognise and report problems with germination. |
| | 2.2 | Remove and hygienically dispose of unwanted seedlings. |
| | 2.3 | Provide aftercare in accordance with instructions. |
| | 2.4 | Ensure working methods promote health and safety, and are consistent with relevant legislation and codes of practice. |
| | 2.5 | Keep records that are accurate, legible and complete. |

RANGE STATEMENT

You must cover the items below:

Element 1: Prepare materials and sow seed

A. Maintain at least one of the following types of **equipment:**

- (i) manual seed sowing equipment
- (ii) seed sowing machines

Element 2: Provide aftercare for seedlings

A. Provide all of the following types of **aftercare:**

- (i) watering
- (ii) temperature/humidity modification
- (iii) pricking out
- (iv) weed control
- (v) pest or rodent control

UNDERPINNING KNOWLEDGE AND SKILLS

1. The required timing of the operation.
2. The maintenance and safe use of equipment.
3. Quantities of seed and growing medium required.
4. Different methods for preparing seed (including: soaking, priming, temperature treatments and scarification).
5. Types of growing medium.
6. Methods for preparing growing medium.
7. Methods for handling seed.
8. Types of machinery that can be used for seed sowing.
9. The need for an even distribution of seed.
10. The correct depth of sowing.
11. Health and safety requirements during work activities.
12. Factors affecting the rate and percentage of germination.
13. The importance of good hygiene in propagation areas.
14. Crop health problems that can occur during propagation.
15. Types of aftercare required.
16. The purpose of the different types of aftercare.
17. Records which must be completed.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Assessment should involve observation of work processes at intervals when preparing materials and sowing seeds as well as providing aftercare for seedlings.

In demonstrating competence in preparing materials and sowing seeds as well as providing aftercare for seedlings you should:

A. Maintain at least **one** of the following types of **equipment**:

- (i) manual seed sowing equipment
- (ii) seed sowing machines

B. Provide **all** of the following types of **aftercare**:

- (i) watering
- (ii) temperature/ humidity control
- (iii) pricking out
- (iv) weed control
- (v) pest or rodent control

Use of equipment, chemical and all other activities must meet the requirements of the law and relevant codes of practice.

A representative range of crops produced in the work environment should be propagated. Aftercare covers activities carried out until completion of pricking out or equivalent growth stages.

(2) Methods of Assessment

Observation by your assessor of you:

- Obtaining the required seed and growing materials in accordance with instructions
- Preparing the growing medium in accordance with instructions
- Handling seeds in a way which minimises damage
- Sowing seed evenly and accurately in accordance with instructions
- Recognising and reporting problems with germination
- Removing and hygienically disposing of unwanted seedlings

Answers to written or oral questions from your assessor.

(3) Context of Assessment

Evidence from simulations is **not** acceptable for this unit.