

## Co-ordinate propagation of plants from seed

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### Overview

This standard is for those who co-ordinate the propagation of plants from seed. Planting may be done using manual seed-sowing equipment or seed-sowing machines. You will be working unsupervised and must be capable of taking responsibility for propagation.

You may be expected to co-ordinate the work of teams; however, this standard also covers the co-ordination of your own workload.

You will need a good understanding of seed preparation methods, different growing media, timing of activities and aftercare requirements.

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### Performance criteria

*You must be able to:*

1. assess the risks associated with the site and the co-ordination of plant propagation from seed
2. co-ordinate the establishment and communication of the working methods for the propagation of plants from seed
3. prepare and implement the seed-sowing programme
4. plan the timing of propagation activities to meet the requirements of the specifications
5. identify and establish the availability of resources required for the propagation of plants from seed
6. check equipment is used and maintained safely and correctly
7. establish measures to maintain suitable levels of hygiene and biosecurity when propagating plants from seed
8. establish measures for the recycling or disposal of waste in accordance with relevant legal and organisational requirements
9. check that seeds are of appropriate quality and are prepared in accordance with specifications
10. confirm growing media have been prepared in accordance with specifications
11. check that seeds are handled in a manner to minimise damage
12. confirm seeds are sown evenly and accurately in accordance with specifications
13. check that optimum environmental conditions are provided for germination of seeds
14. confirm seeds are labelled clearly and accurately
15. co-ordinate and prepare a suitable post-propagation aftercare programme which sustains and promotes plant development
16. confirm the removal and hygienic disposal of unwanted seedlings safely and correctly
17. identify seedlings suitable for the next stage of the propagation programme
18. accurately identify pests and diseases and take action in accordance with organisational policies
19. confirm appropriate records are completed as required by relevant legislation and the organisational requirements
20. confirm that relevant environmental and health and safety policies and risk assessment requirements are put into practice across your area of responsibility

## Knowledge and understanding

*You need to know and understand:*

1. how to identify hazards, assess risks and interpret risk assessments
2. factors which influence the timing of the propagation operation
3. the contents and requirements of the specifications for plant propagation from seed
4. how to identify and establish the availability of resources when carrying out propagation of plants from seed
5. the equipment required for the propagation activity and how to check that it is used and maintained safely and correctly
6. methods of maintaining hygiene and biosecurity when propagating plants from seed and the reasons why it is important
7. the relevant legal and organisational requirements for the handling, transporting and disposal of waste
8. the quantities of seeds required and the correct planting ratios in accordance with the specification
9. how to identify type and quality of seeds and recognise those which are substandard
10. different methods of preparing seeds and the suitability of these to different seed types
11. types of growing media and the reasons for choosing a particular type
12. methods for handling seeds to minimise damage
13. types of machinery that can be used for seed sowing
14. the need for an even distribution of seeds
15. the correct depth of sowing for different types of seeds
16. factors affecting the rate and percentage of germination
17. the methods used to increase rate and percentage of germination including alternatives e.g. non-chemical options
18. pests and diseases which can occur during propagation and what action to take
19. the importance of providing suitable post-propagation aftercare which sustains and promotes plant development
20. the importance of maintaining communication with those involved in, or affected by, your work and how this should be done
21. the importance of monitoring success rates in propagating plants from seed and recording the outcome for improving future germination

22. the importance of maintaining appropriate records for propagation of plants from seed in accordance with relevant legal and organisational requirements
23. the importance of following environmental and ecological best practice to help minimise the impact of your work on the environment
24. your responsibilities under relevant health and safety legislation, codes of practice and organisational policies

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**Scope/range**

- A. use and maintain the following equipment to propagate plants from seed:
  - 1. manual seed sowing equipment
  - 2. seed sowing machines
  
- B. co-ordinate the following types of aftercare:
  - 1. humidity control
  - 2. temperature control
  - 3. pricking out
  - 4. weed control
  - 5. pest or rodent control
  
- C. record the following:
  - 1. propagation activities
  - 2. success rates

## Glossary

### Aftercare:

- humidity control
- temperature control
- light control
- provision of nutrients
- provision of water
- pricking out
- weed control
- pest or disease control

**Instructions:** verbal or written.

### Seed preparation methods:

- soaking
- priming
- temperature treatments
- stratification

**Specifications:** drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, organisational policies

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**Originating Organisation** Lantra

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**Relevant Occupations** Gardener; Nursery Worker; Fruit and Vegetable Production Worker

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**Suite** Horticulture

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