## Propagate plants from seed



#### Overview

This standard is for anyone whose role it is to propagate plants from seed. This may require the operation of manual seed sowing equipment or seed sowing machines.

It covers the preparation of materials and the process of seed sowing. You will need to be aware of seed preparation methods and growing mediums and also the aftercare of the crop in the period from sowing to the end of the propagation phase.

You will be working in accordance with instructions and specifications.

If you are working with machinery you need to be appropriately trained or certificated in line with current legislation.

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## Performance criteria

You must be able to:

- P1 carry out an environmental assessment of the site before starting work
- P2 prepare, use and maintain equipment in a safe, clean and effective condition throughout
- P3 check type and quality of seed to ensure it meets specifications
- P4 check growing medium has been prepared
- P5 prepare the seeds in accordance with specifications
- P6 handle seeds in a way that minimises damage
- P7 evenly and accurately sow seeds in accordance with specifications
- P8 provide optimum environmental conditions for the seed
- P9 maintain suitable levels of hygiene and biosecurity
- P10 remove and dispose of unwanted seedlings in accordance with instructions
- P11 provide aftercare in accordance with specifications
- P12 label seeds in accordance with specifications
- P13 complete records as appropriate
- P14 carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies

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# Knowledge and understanding

You need to know and understand:

- K1 the importance of carrying out an environmental assessment of the site before starting work and the findings which must be reported
- K2 how to prepare, use and maintain equipment in a safe and effective condition
- K3 the importance of completing the activity in accordance with specifications
- K4 how to identify type and quality of seed and recognise those which are substandard
- K5 different methods of preparing seed
- K6 types of growing medium
- K7 methods for handling seeds
- K8 the need for an even distribution of seeds and how to achieve the required ratio
- K9 the correct depth of sowing and how to achieve it
- K10 factors affecting the rate and percentage of germination
- K11 stages of plant development
- K12 how to recognise problems with germination and the action to take
- K13 the importance of maintaining hygiene and biosecurity during seed propagation
- K14 health problems that can occur during propagation
- K15 common pests and diseases encountered during propagation
- K16 types of aftercare required and the purpose including non-chemical alternatives to pests and diseases
- K17 the requirements for labelling
- K18 the records which need to be completed
- K19 your responsibilities under current environmental and health and safety legislation, codes of practice and company policies

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### Glossary

### Seed preparation methods:

- · soaking
- priming
- · temperature treatments
- stratification

#### Aftercare:

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

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

Instructions: verbal or written.

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