



National Unit specification: general information

Unit title: Plant Production from Seed

Unit code: H1JH 11

Superclass: SE

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Summary

This Unit is intended as a general Unit which covers the collection, sowing and growing on of a variety of plants from seed.

Outcomes

- 1 Collect and store seed.
- 2 Prepare to germinate seeds.
- 3 Carry out seed sowing.
- 4 Carry out aftercare of sown and germinated seed.

Recommended entry

Entry is at the discretion of the centre.

Credit points and level

1 credit at SCQF level 5 (6 SCQF credit points at SCQF level 5*).

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

General information (cont)

Unit title: Plant Production from Seed

Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

Complete Core Skill None

Core Skill component Critical Thinking at SCQF level 4

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

National Unit specification: statement of standards

Unit title: Plant Production from Seed

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Collect and store seed.

Performance Criteria

- (a) Identify the correct time of year and method for seed collection.
- (b) Store seed in the correct container and environment.
- (c) Label seed correctly.
- (d) Comply with all relevant Health and Safety requirements.

Outcome 2

Prepare to germinate seeds.

Performance Criteria

- (a) Identify the correct environment for germination of a range of seed.
- (b) Identify appropriate growing media.
- (c) Carry out pre-germinating procedures.
- (d) Identify a range of pre and post germination procedures.
- (e) Carry out pre and post use checks on all tools and equipment.
- (f) Comply with all relevant Health and Safety requirements.

Outcome 3

Carry out seed sowing.

Performance Criteria

- (a) Identify the correct time of year and environmental conditions required to germinate the seeds.
- (b) Sow seeds in containers according to accepted procedures.
- (c) Broadcast sow seeds according to accepted procedures.
- (d) Sow seeds in drills according to accepted procedures.
- (e) Comply with all relevant Health and Safety requirements.

National Unit specification: statement of standards (cont)

Unit title: Plant Production from Seed

Outcome 4

Carry out aftercare of sown and germinated seed.

Performance Criteria

- (a) Identify the procedures required for the aftercare of germinating and germinated seed.
- (b) Carry out correct watering procedures.
- (c) Carry out regular checks on germinating and germinated seed.
- (d) Carry out pest and disease control if required.
- (e) Ensure the correct environmental conditions are maintained throughout.
- (f) Comply with all relevant Health and Safety requirements.

Evidence Requirements for this Unit

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria.

For Outcome 1 the candidate should be presented with a range of different plants to collect seed from; the seed must be collected and stored in the correct container and environment and labelled correctly. The candidate is also required to produce a risk assessment on a pro forma before collecting seed.

For Outcome 2 the candidate is required to identify the suitable environmental conditions and growing media required for the seeds to be planted. The candidate should then carry out all processes required in preparation for germinating the selected seeds. All tools used should be checked pre and post use.

For Outcome 3 performance evidence is required of the candidates' ability to sow a range of seeds and care for the seedlings.

For Outcome 4 performance evidence is required of the candidates' ability to care for sown and germinated seeds.

All relevant Health and Safety requirements must be adhered to at all times throughout this Unit.

The use of chemicals is NOT required in the assessment of this Unit.

National Unit specification: support notes

Unit title: Plant Production from Seed

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit should be taught as a general introduction producing plants from seed. Large scale plant production is not a requirement of this Unit. Quantities should however be large enough to ensure candidates are proficient at all tasks associated with production of plants from seed.

Guidance on learning and teaching approaches for this Unit

This Unit is primarily a practical Unit which gives candidates an opportunity to experience and participate in all aspects of plant production from seed. Candidates can work either individually or in groups. Candidates should collect and sow seed from as wide a range of plants and situations as possible.

Candidates can either use commercially available compost or mix their own. Candidates should be aware of the components of the different composts and growing media that are used in the production of plants from seed.

Visits to local garden centres or growers may be appropriate to demonstrate different stages of plant growth and the different environments that can be used to produce plants from seed.

Candidates could be given a range of trade catalogues either electronically or paper based to allow them to research correct sowing times for a variety of plants.

Examples of plants that could be used are annuals, bi-annuals, vegetables and bedding plants.

Candidates shall comply with all relevant health and safety and safe working practices throughout.

Guidance on approaches to assessment for this Unit

A practical approach to assessment should be taken throughout this Unit, evidence of the candidate's ability to carry out the required practical tasks could be recorded using an observation checklist. There may be opportunities to integrate assessment in this Unit, particularly with Outcomes 2, 3 and 4 where the seeds prepared in Outcome 2 are sown in Outcome 3 and maintained in Outcome 4.

If this Unit is delivered as part of the NC in Horticulture at SCQF Level 5 there may be opportunities to integrate the assessment of this Unit with others such as Use of Hand Tools in Horticulture.

National Unit specification: support notes (cont)

Unit title: Plant Production from Seed

Opportunities for the use of e-assessment

Given the practical nature of this Unit it does not readily lend itself to e-assessment.

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

Opportunities for developing Core Skills

There is no automatic certification of Core Skills or Core Skills components in this Unit, however there may be opportunities to develop the Core Skills of *Communication*, *Problem Solving* and *Working with Others* at SCQF level 4.

This Unit has the Critical Thinking component of Problem Solving embedded in it. This means that when candidates achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 4.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

History of changes to Unit

Version	Description of change	Date
02	Core Skills Component Critical Thinking at SCQF level 4 embedded.	10/10/2012

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