



National Unit specification: general information

Unit title: Protected Crop Production: Pot Plants

Unit code: H1K0 11

Superclass: SE

Publication date: May 2012

Source: Scottish Qualifications Authority

Version: 01

Summary

This Unit is designed to allow the candidate to develop the knowledge and skills required to produce a range of pot plants in protected structures.

Outcomes

- 1 Identify a range of containers and composts suitable for the production of selected pot plants.
- 2 Describe the production systems for a range of pot plants.
- 3 Assist in the production of a range of pot plants.

Recommended entry

While entry is at the discretion of the centre, candidates would normally be expected to have attained one of the following, or equivalent: DOPV 10 *Introduction to Soft Landscaping*; DX12 10 *Crop Production: An Introduction*.

Credit points and level

1 National Unit 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: Protected Crop Production: Pot Plants

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the support notes of this Unit specification.

There is no automatic certification of Core Skills or Core Skill component in this Unit.

National Unit specification: statement of standards

Unit title: Protected Crop Production: Pot Plants

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

Identify a range of containers and composts suitable for the production of selected pot plants.

Performance Criteria

- (a) A suitable container is chosen for the selected pot plants.
- (b) An appropriate compost is chosen for the selected pot plants.

Outcome 2

Describe the production systems for a range of pot plants.

Performance Criteria

- (a) The methods of propagation are clearly described.
- (b) Growing-on procedures are correctly described.
- (c) Suitable environments are correctly identified.
- (d) The stage and time for marketing are correctly identified.

Outcome 3

Assist in the production of a range of pot plants.

Performance Criteria

- (a) Pot plants are correctly propagated and grown on.
- (b) Cultural operations are correctly carried out.
- (c) The plants are correctly spaced on benches.

National Unit specification: statement of standards (cont)

Unit title: Protected Crop Production: Pot Plants

Evidence Requirements for this Unit

Outcome 1 requires the candidate to produce written or oral evidence covering two plants from each of the following categories: foliage; short term flower crop; bulbs.

Outcome 2 requires the candidate to produce written and/or recorded oral evidence to meet the requirements of all Performance Criteria. The range of pot plant production systems described may be the same as Outcome 1 and Outcome 3.

Outcome 3 requires the candidate to produce practical evidence by assisting in the production of a minimum of six pot plant crops.

National Unit specification: support notes

Unit title: Protected Crop Production: Pot Plants

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 has been designed to give candidates an understanding of the range and methods of production of pot plants produced in the UK at present. A range of six plants minimum is studied and produced in the Unit but it would be useful if the candidate were introduced to other types and varieties through visits and study. The chosen crops could include: Cyclamen, Poinsettia, forced Hyacinths, etc for the Christmas market; forced Narcissus, Polyanthus, Cineraria, etc for Mother's Day; Asparagus Fern, Hedera, Ficus, etc for Easter.

Corresponding to Outcomes

- 1 This Outcome covers the types of containers and composts used in pot plant production. It is recommended that reference is made to:
 - ◆ containers including pots, strips, trays, bowls, plugs, modular growing systems, seed trays and boxes
 - ◆ composts including proprietary bagged examples and homemade mixes of; loam based, loam less, sand, peat, peat substitutes, bark, perlite, rooting, sowing, potting
 - ◆ compost fertilisers including slow release and quick release
 - ◆ methods of varying compost pH.

- 2 This Outcome covers the theory of pot plant production systems. It is recommended that reference is made to:
 - ◆ methods of propagation including different types of vegetative and seed
 - ◆ forcing
 - ◆ growth regulators
 - ◆ irrigation
 - ◆ fertilisers
 - ◆ pinching and pruning
 - ◆ supports
 - ◆ spacing
 - ◆ typical pests, diseases and disorders
 - ◆ different types of growing environments
 - ◆ 'readying' plants for market
 - ◆ marketing times.

National Unit specification: support notes (cont)

Unit title: Protected Crop Production: Pot Plants

- 3 This Outcome refers to the practical production of a range of pot plants. It is recommended that the following should be covered:
- ◆ cuttings including leaf and stem
 - ◆ bulb forcing
 - ◆ seed sowing
 - ◆ plug plants
 - ◆ potting
 - ◆ watering
 - ◆ feeding
 - ◆ staking
 - ◆ pinching or pruning
 - ◆ spacing
 - ◆ inspection for pests, diseases and disorders
 - ◆ 'readying' plants for market.

Guidance on learning and teaching approaches for this Unit

Visits to commercial nurseries and a leisure and recreation department producing pot plants could develop the candidates' appreciation of the diversity of techniques used in producing these plants.

Relating to the Outcomes:

Outcome 1

Achieved through visits, lectures and practical classes, also by candidates researching internet and/or collecting trade leaflets.

Candidates could handle samples of the main ingredients during preparation and mixing of compost batches to allow them to become familiar with ingredients and their purpose. During practical sessions, students should comply with safe working practices.

Outcome 2

Candidates should be taught the production systems for a range of pot plants.

Outcome 3

Could be achieved by growing the chosen crops, with the help of back up notes from the instructor.

During practical sessions, students should comply with safe working practices.

National Unit specification: support notes (cont)

Unit title: Protected Crop Production: Pot Plants

Opportunities for developing Core Skills

Although there is no automatic certification of Core Skills or Core Skill component in this Unit, the following Core Skills have been identified as necessary for the successful completion of this Unit.

Communication — candidates prove their ability to convey accurate information, either in writing or orally, in the assessments for Outcomes 1 and 2.

Numeracy — the successful completion of Outcome 3 requires the application of simple numerical skills when for example working out the number of cuttings or seedlings needed to fill a tray or module system..

Problem Solving — in Outcome 1, candidates require the use of critical thinking when selecting containers and composts suitable for the production of selected pot plants.

Planning and Organising — being able to accurately identify the order and timing of the various stages of pot plant production systems requires planning and organisational skills.

Working with Others — candidates are likely to work in small groups when completing the practical tasks identified in Outcome 3. As a group they must plan, agree and each take responsibility for different aspects of the tasks.

Guidance on approaches to assessment for this Unit

Outcome 1

Written or oral exercise; could be carried out in a potting shed situation where the candidate has to match the six selected plants with suitable containers and appropriate composts, stating one reason for each of their choices.

Outcome 2

Could be project based or the candidate may keep a detailed log of the whole production process for each crop produced.

Outcome 3

Practical exercise used with observation checklist — the candidate assists in the production of six pot plant crops for market or decoration.

Opportunities for the use of 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 e-checklists. 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)*.

National Unit specification: support notes (cont)

Unit title: Protected Crop Production: Pot Plants

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

© Scottish Qualifications Authority 2012

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre, telephone 0845 279 1000.