



National Unit specification: general information

Unit title: Bedding Plant Production

Unit code: H1KA 11

Superclass: SE

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Summary

This Unit will allow the candidate to develop the practical skills and knowledge necessary to produce a wide range of bedding plants.

Outcomes

- 1 Identify common bedding plants.
- 2 Produce a range of bedding plants from plugs and rooted cuttings.
- 3 Describe the production systems for growing seasonal bedding plants.
- 4 Prepare a container suitable for bedding plants for outdoor display purposes.
- 5 Identify the important production costs in raising commercial bedding plants from plugs and rooted cuttings.

Recommended entry

Entry is at the discretion of the centre.

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: Bedding Plant Production

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: Bedding Plant Production

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 common bedding plants.

Performance Criteria

- (a) Common bedding plants are correctly identified at the plug stage using trade names.
- (b) Common bedding plants are correctly identified at the flowering stage using trade names.

Outcome 2

Produce a range of bedding plants from plugs and rooted cuttings.

Performance Criteria

- (a) Appropriate containers are selected and are correctly filled with appropriate compost.
- (b) Plugs and rooted cuttings are handled correctly and planted in container.
- (c) The young plants are correctly watered in following planting.
- (d) A suitable environment for growing on the young plants is correctly selected.
- (e) The job is well finished and completed in an appropriate timescale.
- (f) The work methods of and practices demonstrated by the candidate are safe and in accordance with the requirements of all relevant Health and Safety regulations.

National Unit specification: statement of standards (cont)

Unit title: Bedding Plant Production

Outcome 3

Explain the production systems for growing seasonal bedding plants.

Performance Criteria

- (a) Timing of production and environmental conditions for growing on are correctly explained.
- (b) Lighting techniques for growing on plants are appropriately explained.
- (c) Techniques to speed up the job of plug/cutting processing are clearly identified.
- (d) Plug systems of growing are described correctly.
- (e) Methods of irrigating bedding plants during growing on are explained.
- (f) Temperature and ventilation requirements are clearly explained.
- (g) Hardening off techniques are clearly explained.
- (h) Disease control methods are clearly explained.

Outcome 4

Prepare a container suitable for bedding plants for outdoor display purposes.

Performance Criteria

- (a) Suitable plant material is correctly chosen.
- (b) Correct compost and container is selected.
- (c) Plants are arranged appropriately.
- (d) Plants are correctly watered.
- (e) The job is presented in a well finished manner.
- (f) The work methods of and practices demonstrated by the candidate are safe and in accordance with the requirements of all relevant Health and Safety regulations.

Outcome 5

Explain the importance of controlling production costs in raising commercial bedding plants from plugs and rooted cuttings.

Performance Criteria

- (a) Unit cost analysis is clearly explained.
- (b) Methods of saving direct costs are clearly identified.
- (c) Methods of improving efficiency by saving on heat costs are clearly explained.
- (d) Methods of improving efficiency by saving on labour costs are clearly explained.
- (e) The use of work study methods for saving costs is explained.

National Unit specification: statement of standards (cont)

Unit title: Bedding Plant Production

Evidence Requirements for this Unit

For Outcome 1 candidates would be required to identify ten half-hardy summer bedding plants and five spring bedding plants each at plug stage and flowering stage.

For Outcome 2 candidates would be required to produce practical evidence of plug and cutting processing based on planting two different sized containers to recognised production systems.

For Outcome 3 written and/or recorded oral evidence is required to meet the requirements of the Performance Criteria.

For Outcome 4 candidates are required to produce practical evidence by making up a container suitable for outdoor display purposes.

For Outcome 5 candidates are required to produce evidence that they can identify the important production costs in raising commercial bedding plants, the unit cost analysis should include: plug and rooted cuttings; labour; trays; compost and heating.

National Unit specification: support notes

Unit title: Bedding Plant Production

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

Corresponding to Outcomes 1-5:

- 1 Appreciation of the importance of spring and summer bedding plant production for landscape features and commercial sale. Identification of ten summer bedding plants and five spring bedding plants other than bulbs. Identification should extend to seedling plugs as well as to the plant in flower.
- 2 Knowledge of how and when seasonal bedding plants are produced from plugs and rooted cuttings in containers appropriate to a recognised production system.

Traying up techniques.

Labelling systems and their importance.

Watering, ventilation, hardening off, pest and disease control, growth control and feeding.

Candidates should be aware of the role of computers in glasshouse environmental control, production scheduling and record keeping.
- 3 Production systems to be demonstrated where possible.

Tray/pack production, pot and plug, strips and modules.

Responses of plants to different systems. Sowing machines, lighting rigs, growing rooms.
- 4 Production by each candidate of a hanging pot, basket, window box or patio container:
 - (a) choice of plant material
 - (b) choice of compost
 - (c) creating the feature
 - (d) general maintenance
- 5 Ministry of Agriculture production costings for seasonal bedding plants. Economies and where they can be made. Knowledge of market outlets.

National Unit specification: support notes (cont)

Unit title: Bedding Plant Production

Guidance on learning and teaching approaches for this Unit

Much of this Unit could be achieved through practical activity.

Visits to a commercial holding or a leisure and recreation department would help to illustrate different techniques.

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*, *Numeracy*, *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.

Guidance on approaches to assessment for this Unit

Acceptable performance in the Unit will be satisfactory achievement of the Performance Criteria specified for each Outcome.

Outcome 1 could be assessed through an identification test which requires the candidate to identify a minimum of 15 plants (ten half-hardy summer and five spring bedding plants) at both the plug and flowering stage.

Outcomes 2 and 4 could be assessed through observation of the candidates practical work recorded on an observation checklist.

Outcome 3 and 5 could be assessed through a written or recorded oral report or essay.

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)*.

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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