

National Unit Specification: General Information

UNIT Bedding Plant Production (Intermediate 2)

NUMBER D836 11

COURSE

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 seed.
- 3 Produce bedding plants from cuttings.
- 4 Describe the production systems for growing half-hardy summer bedding plants.
- 5 Prepare a hanging basket suitable for outdoor display purposes.
- 6 Identify the important production costs in raising commercial bedding plants.

RECOMMENDED ENTRY

It would be beneficial if the candidate has previously achieved 88211 Plant Production from Seed; 78151 Protected Environment: Sites and Structures; 68191 Rooting, Seed and Potting Compost.

CREDIT VALUE

1.0 Credit at Intermediate 2.

CORE SKILLS

Information on the automatic certification of any core skills in this unit is published in *Automatic Certification of Core Skills in National Qualifications* (SQA, 1999).

Administrative Information

Superclass: SD

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Source: Scottish Qualifications Authority

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National unit specification: statement of standards

UNIT Bedding Plant Production (Intermediate 2)

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 the Scottish Qualifications Authority.

OUTCOME 1

Identify common bedding plants.

Performance Criteria

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

Evidence Requirements

Evidence for this outcome can be provided in the form of an identification test. The candidate would be expected to identify 10 half-hardy summer bedding plants and 5 spring bedding plants at each growth stage.

OUTCOME 2

Produce a range of bedding plants from seed.

Performance Criteria

- a) Appropriate compost is selected and the containers are correctly filled.
- b) Seed containers are correctly watered.
- c) A suitable quantity of seed is selected and distributed evenly.
- d) The seeds are correctly covered if necessary.
- e) A suitable environment for the seed is correctly selected.
- f) Suitable trays and composts for pricking-off are selected.
- g) Seedlings are evenly spaced and planted to the correct depth.
- h) The job is well finished and completed in an appropriate timescale.

Evidence Requirements

Evidence for this outcome can be presented in the form of a practical exercise in seed sowing, based on sowing two different sized seeds. A practical exercise in pricking-off, based on pricking-off seedlings into trays or other containers appropriate to recognised production systems.

National unit specification: statement of standards (cont)

UNIT Bedding Plant Production (Intermediate 2)

OUTCOME 3

Produce bedding plants from cuttings.

Performance Criteria

- a) Suitable plant material is selected.
- b) The correct type and size of cutting is used.
- c) Cuttings are appropriately inserted and spaced.
- d) Adequate rooting is provided.
- e) Rooting hormones are used where appropriate.

Evidence Requirements

Evidence for this outcome can be provided in the form of a practical exercise based on taking and making cuttings to produce bedding plants.

OUTCOME 4

Describe the production systems for growing half-hardy summer bedding plants.

Performance Criteria

- a) Timing of sowings and environmental conditions for germination are correct.
- b) Lighting techniques for germinated bedding plants are appropriate.
- c) Techniques to speed up the job of pricking-off 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 described.
- h) Disease control methods are clearly explained.
- i) Direct sowing techniques are explained.

Evidence Requirements

Evidence for this outcome can be provided in a written and/or oral format in the form of a short answer test consisting of 10 questions.

OUTCOME 5

Prepare a hanging basket suitable 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.

National unit specification: statement of standards (cont)

UNIT Bedding Plant Production (Intermediate 2)

Evidence Requirements

Evidence for this outcome can be provided in the form of a practical exercise in which the candidate makes up a hanging basket suitable for outdoor display purposes.

OUTCOME 6

Identify the important production costs in raising commercial bedding plants.

Performance Criteria

- a) The current major direct costs of production are identified.
- b) The current indirect costs of production are identified.
- c) Methods of saving direct costs are clearly identified.
- d) Methods of improving efficiency by saving on heat costs are clearly explained.
- e) Methods of improving efficiency by saving on labour costs are clearly explained.
- f) The use of work study methods for saving costs is explained.

Note on range for the outcome

Current major direct costs should include: seeds; labour; trays; compost; heating.

Methods of saving direct costs should include: trays; compost.

Evidence Requirements

Evidence for this outcome can be provided in a written and/or oral format.

National unit specification: support notes

UNIT Bedding Plant Production (Intermediate 2)

This part of the unit specification is offered as guidance. None of the sections of the support notes is mandatory.

GUIDANCE ON CONTENT AND CONTEXT

Corresponding to outcomes 1-6:

1 Appreciation of the importance of spring and summer bedding plant production for landscape features and commercial sale. Identification of 10 summer bedding plants and 5 spring bedding plants other than bulbs. Identification should extend to seedling form as well as to the plant in flower.

2 Knowledge of how and when half-hardy summer bedding plants are produced from seed sown in containers appropriate to a recognised production system.

Production from fine, medium and large seed sowings.

Awareness of the conditions needed for germination.

Pricking off techniques.

Labelling systems and their importance.

Watering, ventilation, hardening off, pest and disease control, growth control and feeding. Sowings of a spring bedding plant like wallflower should be carried on outside.

Candidates should be aware of the roll of computers in glasshouse environmental control, production scheduling and record keeping.

3 Production of bedding plants from cuttings.

Preparation of cuttings, feeding and maintenance (Geranium might be used).

4 Production systems to be demonstrated where possible.

Tray/box production, block, pot and plug, strips and modules.

Responses of plants to different systems. Sowing machines, lighting rigs, growing rooms.

National unit specification: support notes (cont)

UNIT Bedding Plant Production (Intermediate 2)

- 5 Production by each student 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.
- 6 Ministry of Agriculture production costings for half-hardy summer bedding plants. Economies and where they can be made. Knowledge of market outlets.

GUIDANCE ON TEACHING AND LEARNING APPROACHES

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.

GUIDANCE ON APPROACHES TO ASSESSMENT

Acceptable performance in the unit will be satisfactory achievement of the performance criteria specified for each outcome.

SPECIAL NEEDS

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment and Certification Arrangements* (SQA, 1998).