

Propagate Ornamental Plants from Seed Facilitator's Guide

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**GENERAL CERTIFICATE IN ORNAMENTAL
HORTICULTURE LEVEL 1
Facilitator's Guide :
Propagate Ornamental Plants from Seed**

A c k n o w l e d g e m e n t s

Developed by

Lifestyle College

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Study Session Overview

Study Session Purpose

This study session forms part of the General Certificate in Ornamental Horticultural, NQF Level 1 and is aligned with the Unit Standard Propagate Ornamental Plants from Seed, worth 5 credits.

The purpose of this study session is to equip learners with the skill and knowledge necessary to propagate ornamental plants from seed, which forms the skills and knowledge base for people working with plants within the ornamental horticulture or landscaping industry.

These skills and knowledge will form the basis of the learners' horticultural studies and help them to meet the assessment criteria, as outlined by the Unit Standard, namely:

- Select the appropriate growing media and containers.
- Fill seedling containers.
- Prepare a seedbed.
- Explain the importance of correct labeling and documentation.
- Explain the importance of sowing seeds at the correct spacing or density.
- Sow various seed types.
- Explain the reasons why an adequate soil cover must be laid over seeds.
- Apply soil covering.
- Describe the process of batch separation and labeling.

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- Explain the necessity of attaining the correct moisture content of the growth media.
- Explain the importance of selecting the correct equipment for the application of water on the seedbed.
- Identify examples of sprinklers and hand held sprays that are suitable for watering a seedbed.
- Identify examples of watering cans equipped with suitably fine nozzles.
- Demonstrate the methods of applying water to ensure that seed displacement will be prevented.
- Describe the factors that affect the rate of germination.
- Explain the importance of monitoring the development of the radicle.
- Inspect the status of the radicle.

Specific Outcomes

This study session covers all the Specific Outcomes as outlined in the Unit Standard: Propagate Ornamental Plants from Seed, namely:

- Prepare for seed sowing.
- Sow seeds manually.
- Apply water to sown seed.
- Maintain an environment for germination.
- Monitor the germination process.

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Unit Standard Pre-requisites

Demonstrate knowledge of communication and Numeracy at Abet level 3.

NQF Principles

This study session has been designed to meet with the principles of the National Qualifications Framework. The lessons are outcomes based and aligned with an Agriculture and Nature Conservation Unit Standard. The competence acquired is portable and the content will articulate across the Horticulture industry.

The Learning System

The Learning Systems used in this study session are **outcomes based and process centered**.

The learner is expected to achieve competence in the process first and foremost. If the process is understood, learners can then adapt their actions under a range of different situations to include problem solving, critical thinking, diagnostics etc. This also means that learners can apply the same skill in different contexts, where the outcome is the same.

Furthermore learners develop the competence to reflect on decisions made and judge the value and effectiveness of their performance in the outcomes mentioned.

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In an effort to replicate the workplace situation, learners will use workplace examples and context to prepare for and sow seeds.

This learning process caters for all learning styles and preferences.

Bloom's Level

This study session has been designed at Blooms Cognitive Doom, Application level in accordance with the level set by the Specific Outcome and Assessment Criteria of the Unit Standard: Propagate Ornamental Plants from Seed.

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How this study session works

This study session has been divided into four lessons, held over a period of 2 ½ days:

Lesson 1: Germination	After learners have worked through Lesson 1, they should be able to: <ul style="list-style-type: none">▪ Maintain an environment for germination and monitor this process.▪ Describe and monitor the factors that affect the rate of germination.▪ Explain the importance of checking on the development of the radicle.▪ Inspect the status of the radicle.
Lesson 2: Prepare for Seed Sowing	After learners have worked through Lesson 2, they should be able to: <ul style="list-style-type: none">▪ Select the right growing media and container for their seed sowing.▪ Fill seedling containers.▪ Prepare the seedbed.▪ Explain why it is important to correctly label and document the seeds they have sown.
Lesson 3: Sow Seeds	After learners have worked through Lesson 3, they should be able to: <ul style="list-style-type: none">▪ Explain why it is important to sow seeds at the correct spacing or density.▪ Sow various seed types.▪ Explain why an adequate soil cover must be laid over the sown seeds.▪ Describe the process of batch separation and labeling.

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Lesson 4 : Water Seeds	After learners have worked through Lesson 4, they should be able to : <ul style="list-style-type: none">▪ Explain the necessity of attaining the correct moisture content of the growth media.▪ Explain the importance of selecting the correct equipment for the application of water on the seedbed.▪ Identify examples of sprinklers and hand held sprays that are suitable for watering a seedbed.▪ Identify examples of watering cans equipped with suitably fine nozzles.▪ Demonstrate methods of applying water to make sure that the sown seeds will not be displaced.
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The Delivery Methods

Background notes have been written throughout this Guide to enable the facilitator to understand the essential background, concepts and frames of reference used by the design team during the development of this study session.

The target audience profile conducted indicates the need for highly interactive and motivating lessons with much of the work being done by the learners. The study session design is therefore highly interactive and has as its premises the following core Learning Methodology:

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- Trainee 'state' management to draw on the curiosity, anticipation, suspense, confidence building, delight and exploration in order to ready trainees for learning.
- Mind-set management to address trainees' learning barriers and mental reservations about the training at the outset of the experience.
- Planned format variety to stimulate all five of the learners' senses i.e. sight, sound smells, taste and touch and to appeal to the Visual, Auditory and Kinesthetic learning styles identified by NLP.
- Participant-centered activities to actively involve learners in the learning process. The activities are comprehensive, practical and experiential in nature with great emphasis on the process, which *integrates* foundational, practical and reflective competence.
- Activities are based on "real work" where learners work with real workplace scenarios and case studies.

The range of delivery methods include:

- Experiential activities, Demonstrations, Observation, Lecture and Self-study.

The trainer's role throughout these study sessions is that of a guide, a mentor, and a facilitator. Where explanations are needed these are provided for the facilitator.

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Your responsibility as a facilitator using this material is to establish:

- Trust – without trust we feel foolish and cease to learn. Trust is vital because many of the activities require a willingness to give genuine feedback and to experience feedback in order to develop and progress.
- Curiosity.
- Enthusiasm – nothing works better than a little enthusiasm. Enthusiasm is contagious. If you, the facilitator, are enthusiastic about the outcomes of the activities, and genuinely believe in what is possible, your enthusiasm will be communicated to the participants. It is essential to believe in the activities and feel an adventurous excitement about what can achieve.

Specific learning outcomes listed at the beginning of each section within both the Facilitator's Guide and Learner's Workbook serve to guide and inform the learning.

Learner Roles and Responsibilities

The learner is expected to actively take part in the lessons by:

- Taking part in and completing group activities, practical assignments and discussions.
- Planning and preparing for the training.
- Asking for support when needed.
- Giving meaningful input into and challenging the status quo.
- Finding new and better ways of doing things
- Developing sound and effective practices given the input from the facilitator and the rest of the group
- Comply with assessment requirements.

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Learner Guidance and Support

The facilitator will provide guidance as to the content and suitability of the course to potential delegates.

Throughout the learning experience, the facilitator will:

- Provide ongoing support to the learners to assist them with the achievement of the outcomes.
- Provide delegates with all the necessary training material.
- Manage the learning process during the training.

Assessment Strategy

Assessment is focused on the applied competence of the learner and the assessment criteria are determined by the relevant unit standard.

- **Formative** - Learners are assessed continually during the lessons, by means of practical and experiential activities.
- **Summative** – Assessment is integrative and evidence is collected through an observation and knowledge questionnaire.
- **Rating** – On successful completion of the summative assessment, learners are rated "Competent" or "Not Yet Competent" against the Unit Standard assessment criteria.

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The laid down policies and procedures with regard to assessment, moderation, RPL and appeals govern this assessment.

Facilitator Qualifications