LANAgC9
Analyse samples to identify seeds, pests, diseases and disorders

Overview

This standard covers the identification of seeds, pests, diseases and disorders from analysis of samples in a laboratory environment. You will be expected to select and use relevant knowledge, skills and procedures to complete well-defined tasks. You will be required to work to the relevant workplace procedures, legislation and organisational policy and use good scientific or technical techniques to aid identification.

You will understand the safety precautions required for working in a laboratory and demonstrate safe working practices throughout.

Carrying out laboratory testing techniques is covered in the LATA NOS developed by SEMTA.

This standard is suitable for those working in a laboratory environment in the land-based and environmental sector.

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Performance criteria

You must be able to:

- P1 carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies
- P2 use safe practices and the appropriate personal protection equipment when doing scientific or technical activities
- P3 maintain suitable levels of hygiene and bio-security
- P4 establish reasons for analysis and identification of seed, pests, diseases and disorders
- P5 obtain and prepare material/seed samples for analysis and identification
- P6 conduct analysis on samples in accordance with correct procedures and techniques
- P7 carry out further analysis or testing where necessary to confirm identification
- P8 record the results in accordance with workplace procedures
- P9 deal with waste safely and correctly in accordance with workplace procedures and legislation
- P10 return and store equipment and materials to the correct location
- P11 communicate the required information on identification to the appropriate person in accordance with organisational procedures.

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Knowledge and understanding

You need to know and understand:

K1	your responsibilities under relevant environmental and health and safety legislation, codes of practice and company policies
K2	the importance of wearing appropriate personal protective equipment when doing scientific or technical activities
K3	the importance of maintaining hygiene and bio-security during scientific or technical activities, and the methods for achieving this
K4	different methods used to analyse and identify seeds, pests, diseases and disorders
K5	reasons for carrying out analysis and identification of seeds/materials
K6	the minimum size/volume of sample required for identification
K7	how to establish if a sample is suitable for identification
K8	workplace policies and procedures relating to the identification of seeds, pests, diseases and disorders
K9	how to name seeds, pests, diseases and disorders correctly in line with naming convention
K10	where to obtain and how to use sources of information to aid identification
K11	further tests which may be required to confirm identification
K12	the format for reporting and communicating findings
K13	the types of equipment used and correct procedures for storage
K14	the legal and organisational requirements for the handling, transport, storage and disposal of waste

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Glossary

Identification: purity tests, germination tests
Diseases may be fungal, viral or bacterial.
Disorders may include nutrient deficiencies (e.g. nitrogen or calcium deficiencies).
Samples may be: seeds, plant material, animal material

Links to other NOS

This NOS standard links to the SEMLATA
SEMLATA2-12
SEMLATA 14
SEMLATA3-03

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