



Australian Government

Department of Education, Employment and Workplace Relations

AHCSDT307A Perform a ‘Determination of Other Seeds by Number’ test

Release 1

AHCSDT307A Perform a 'Determination of Other Seeds by Number' test

Modification History

Release	TP Version	Comments
1	AHC10v4	Initial release

Unit Descriptor

This Unit covers the estimation of the number of seeds of other species either generally (e.g. all other species) or by reference to one category or species of seed.

Application of the Unit

This Unit applies to seed analysts working independently or under limited supervision, within enterprise guidelines. In general, they prepare samples for testing; conduct specified tests in accordance with enterprise requirements; maintain records and interpret results; and troubleshoot equipment problems.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Nil.

Employability Skills Information

This Unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

- | | |
|------------------------------------|--|
| 1. Prepare a working sample | 1.1 Seed to be tested is identified and records completed.
1.2 Working sample is prepared from submitted sample.
1.3 Size of working sample conforms with that prescribed under ISTA rules.
1.4 The <i>extent of determination of other species</i> is selected based on client requirements, seed quantity or seed characteristics. |
| 2. Examine seeds in working sample | 2.1 Working sample is searched for seeds of all other species or of certain stated species as required.
2.2 Number of seeds found for each species is counted. |
| 3. Calculate results | 3.1 Result is expressed as the number of seeds belonging to each stated species or category found in the quantity examined.
3.2 Number of seeds per unit weight is calculated.
3.3 Where two or more tests are carried out, result is expressed as total number of seeds found in total weight examined.
3.4 Comparison of result is made with other determinations in the same or in a different laboratory. |
| 4. Report results | 4.1 Result is reported under 'Other determinations'.
4.2 Actual weight of seed examined is recorded.
4.3 The scientific name and number of seeds of each species sought and found in the actual weight of seed examined.
4.4 Extent of determination of other species of seed is recorded. |

Required Skills and Knowledge

This section describes the skills and knowledge required for this Unit.

Required skills include:

Ability to:

- prepare a working sample to ISTA rules
- identify a range of species
- examine and count seeds
- calculate weights and percentages
- report results.

Required knowledge includes:

Knowledge of:

- the role of the International Seed Testing Association (ISTA) and the ISTA Rules for Seed Testing
- seed biology
- seed identification
- enterprise and/or legal traceability requirements
- enterprise standard operating procedures (SOPs)
- relevant health, safety and environment requirements.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this Unit	Evidence of the ability to: • prepare a working sample • examine seeds in working sample • calculate results • report results.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.
Method of assessment	This Unit should be assessed together with core Units and other Units of Competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency of performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

The range statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Extent of determination of other species may include:

"complete test" if full prescribed weight of seed is tested for all other species; "limited test" if test was for a limited range of other species; "reduced test" if weight tested was less than prescribed weight; "reduced-limited test" where weight was under prescribed weight and a limited number of species was examined; "test based on 25,000 seeds" where a sample of 25,000 seeds was examined and this sample was below the prescribed weight.

Unit Sector(s)

Seed Testing