



Australian Government

Department of Education, Employment and Workplace Relations

AHCSDP405A Inspect a seed crop for quality assurance purposes

Release 1

AHCSDP405A Inspect a seed crop for quality assurance purposes

Modification History

Release	TP Version	Comments
1	AHC10v4	Initial release

Unit Descriptor

This Unit covers the skills and knowledge required to undertake a field inspection and prepare a report on crop for commercial seed production.

Application of the Unit

This Unit applies to commercial seed crop field inspectors who undertake crop inspection activities and produce reports for the purpose of describing the quality and suitability of that crop for commercial seed production.

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

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for field inspection	1.1 Inspection date according to suitable crop growth stage and related activities is established. 1.2 A suitable time for crop inspection is arranged with grower. 1.3 Vehicle, machinery, equipment and recording materials are checked and prepared prior to undertaking crop inspection. 1.4 Paddock history and crop type is researched prior to inspection.
2. Undertake a visual analysis of a commercial seed crop	2.1 Weed species are visually identified, and weed counts or density are recorded. 2.2 Insect/disease damage is visually inspected and recorded. 2.3 Varietal identity of crop is visually inspected and recorded. 2.4 Varietal purity of crop (presence of off-types) is visually inspected and recorded. 2.5 Quadrat or rule is used to count crop plants to estimate yield.
3. Complete an inspection report	3.1 Results of visual inspection are documented and analysed. 3.2 A determination is made on the quality and suitability of the crop for commercial and/or regulatory production. 3.3 Determination is recorded in a crop inspection report and is forwarded to relevant parties.
4. Complete decontamination procedure prior to leaving site	4.1 Vehicles, machinery and equipment are checked and cleaned of seeds, soil and other contaminants. 4.2 Clothing and footwear is checked and cleaned of seeds, soil and other contaminants. 4.3 Contaminants and other foreign materials are handled and disposed appropriately.

Required Skills and Knowledge

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

Required skills include:

Ability to:

- visually analyse a crop
- identify available processes of literature searches, internet browsing, personal consultation with experts, specimen collections, field guides, workplace notes, and use of keys and charts to aid identification
- identify a range of commercial seed crops including morphology of plants grown for commercial seed, crop registration history and crop density
- measure crop density
- determine varietal purity (identifying off-types) including testing for and follow up audits
- identify weeds
- use research skills.

Required knowledge includes:

Knowledge of:

- requirements of Australian Quarantine Inspection service (AQIS) and AQIS Authorised Officers (AAO) phytosanitary reports
- hygiene requirements for crop inspectors
- plant breeders' rights
- concepts of disease pressure
- concepts of pest pressure
- field inspectors reports
- crop sampling techniques and use of quadrats
- crop/seed certification systems for example Organisation for Economic Co-operation and Development (OECD), Australian Seed Authority (ASA)
- 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	The evidence required to demonstrate competency in this Unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following: • classification of seed to species and/or variety level • use of taxonomic terms to describe seed • updating of seed reference collection
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	• Assessment methods must satisfy the endorsed Assessment Guidelines of the AHC10 Training Package and can be assessed holistically with other Units. • Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge. • Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills. • Assessment methods must confirm the ability to access, interpret and apply the required knowledge. • Assessment may be applied under project-related conditions (real or simulated) and require evidence of process. • Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances. • Assessment may be in conjunction with assessment of other Units of Competency.

	• The assessment environment should not disadvantage the candidate. • Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English. • Where the participant has a disability, reasonable adjustment may be applied during assessment. • Language and literacy demands of the assessment task should not be higher than those of the work role
Guidance information for assessment	To ensure consistency in 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.

Seed characteristics may include:	Trueness to type, varietal purity, morphology.
Machinery and equipment may include:	Vehicles, motor bikes, quadrats, metre rule.
Checking and preparation for inspection may include:	Cleaning and appropriate disposal of contaminants and other foreign materials.
Crops may include:	Grass, legume, oilseed and horticultural crops grown for resale as commercial seed.

Unit Sector(s)

Seed Production