



Australian Government

AHCBAC507 Develop production plans for crops

Release: 1

AHCBA507 Develop production plans for crops

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to develop production plans for agricultural and horticultural crops.

All work must be carried out to comply with workplace procedures, work health and safety and biosecurity legislation and codes, and sustainability practices.

This unit applies to individuals who demonstrate deep knowledge in a specific technical area, take personal responsibility and exercise autonomy in undertaking complex work. They organise the work of self and others and analyse, design and communicate solutions to sometimes complex problems.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Broad acre cropping (BAC)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Select crop species and variety	1.1 Establish production targets for each crop type, consistent with marketing and enterprise objectives 1.2 Assess and select crop types and varieties for their market potential and gross margin returns for the farm environment 1.3 Select most profitable cultural practices and rotations, consistent with disease and pest management strategies, available machinery

Element	Performance criteria
	resources, and management for sustainability of resources 1.4 Assess technology to ensure most efficient performance of operations 1.5 Identify production risks for each crop and determine strategies to address these 1.6 Identify environmental risks and develop appropriate strategies
2. Establish yield potential and quality specification for crop	2.1 Source relevant benchmark yields, where available, to assist setting target yields 2.2 Analyse past production records and determine the key determinants of yield 2.3 Use appropriate available models for calculating water use efficiency or other key determinants of yield to assist in setting target yields 2.4 Establish quality specifications and target yields for all crops
3. Prepare crop program	3.1 Assess proposed crop land areas for nutrient, pest and disease status, water reserves, tillage requirements, and other factors before selecting crop variety 3.2 Use records of chemical use for planning to reduce chemical resistance 3.3 Select crop variety and plan paddock preparation, planting, fertilising and other treatments 3.4 Determine optimum timing of planting, applications and treatments and prepare calendar of operations 3.5 Determine cash flow budget for the cropping program
4. Review production plan	4.1 Plan logistical arrangements related to harvesting, transportation, marketing and other key production cycle operations 4.2 Plan and check machinery and equipment requirements for the crop production cycle 4.3 Assess work health and safety requirements of the production plan 4.4 Identify and plan labour requirements for the crop production cycle 4.5 Identify seed, fertiliser, pest and disease treatments and other input requirements 4.6 Establish record keeping system provide data for the analysis of crop performance, and to meet other statutory requirements including records of chemical use 4.7 Review and amend production plan and documented as a final plan

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCBA507A Develop production plans for crops.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCBA507 Develop production plans for crops

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Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- prepare budgets and gross margins
- source and interpret relevant benchmark information from consultants or peers
- assess proposed crop land areas for nutrient status by sampling and testing soils and plant tissue
- analyse past production records
- select crop species and variety
- source and interpret relevant benchmark information
- select crop species and variety and determine yield potential for crop
- demonstrate correct use of technology to improve efficiency
- prepare crop programs
- review, amend and document the production plan
- prepare budgets and gross margins
- source and interpret relevant benchmark information
- prepare individual paddock plans and a whole farm cropping plan
- assess work health and safety implications of the plan.

Knowledge Evidence

The candidate must demonstrate knowledge of:

- determinants of crop yield
- cultural practices related to cropping
- role of technology in improving efficiency
- market prices, gross margins, cash flow budgets
- benchmark performance indicators
- disease and pest management for relevant crops

- machinery and equipment requirements for cropping
- record keeping systems.

Assessment Conditions

Competency is to be assessed in the workplace or simulated environment that accurately reflects performance in a real workplace setting.

Assessors must satisfy current standards for RTOs.

Links

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