



Australian Government

AHCBAC503 Manage integrated crop and pasture production

Release: 1

AHCBA503 Manage integrated crop and pasture production

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to manage integrated crop and pasture production.

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. Develop a pasture and crop program	1.1 Establish production targets for each crop and pasture type consistent with marketing and enterprise objectives 1.2 Select plant varieties that are best suited to soil, climate, seasonal conditions and marketing goals 1.3 Determine irrigation schedules, where required, for each soil and crop or pasture type based on assessed water requirements, rainfall

Element	Performance criteria
	and evapo-transpiration data 1.4 Assess nutrient requirements for crops and pastures to determine appropriate fertiliser program 1.5 Assess technology to ensure most efficient performance of operations 1.6 Identify and maintain budgetary constraints appropriately 1.7 Develop a pasture and crop program to meet production targets and enterprise objectives 1.8 Identify work health and safety hazards in crop & pasture management and develop control strategies
2. Implement pasture and crop management program	2.1 Implement pasture and crop program and monitor pasture capacity appropriately 2.2 Implement planned strategic grazing, where necessary, to reduce or eradicate areas of weed infestation 2.3 Determine and conduct fertiliser applications and rates appropriate to crop or pasture type 2.4 Apply crop and pasture nutrient requirements to ensure achievement of yield and sustainability of pasture 2.5 Monitor soil moisture schedule watering, and adjust as required 2.6 Determine and implement appropriate processes to minimise waste, soil degradation and environmental standards
3. Monitor crop or pasture growth and fodder production	3.1 Determine longer term trends in weed, pest and disease incidence and implement any necessary control measures changes 3.2 Monitor soil structure and erosion, determine and implement any necessary changes to cultural practices, grazing management and drainage 3.3 Check and maintain irrigation and drainage systems 3.4 Monitor grazing management 3.5 Integrate livestock into the cropping cycle through grazing of pastures returning to crop, stubbles and crop residues, and dual purpose crops 3.6 Identify feed surpluses and deficiencies and take appropriate action 3.7 Monitor crop or pasture maturity is monitored and conduct harvesting to meet marketing and production targets
4. Review production level	4.1 Monitor pasture and crop yields and evaluate against forecast production levels 4.2 Evaluate efficiency and effectiveness of grazing and cropping programs and document for future best practice 4.3 Evaluate production performance of each enterprise and document for management program review

Element	Performance criteria
	4.4 Maintain appropriate production records for production performance analysis and evaluation

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 AHCBA503A Manage integrated crop and pasture production.

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 AHCBA503 Manage integrated crop and pasture production

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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:

- measure and assess quantities of fertiliser
- apply environmental protection strategies in land use
- set objectives and milestones
- determine soil quality and land use capability
- predict patterns of weed infestation
- design irrigation processes to avoid soil degradation
- apply correct use of technology to improve efficiency
- assess financial strategies and prepare budgets
- develop a pasture and crop program to meet production targets and enterprise objectives
- maintain the productivity of crops and pastures in a farming system
- monitor soil structure and erosion and make required changes to cultural practices and grazing management
- implement grazing strategies to optimise pasture and livestock production levels and support the cropping program
- evaluate grazing and cropping programs for efficiency and effectiveness
- use physical and financial records of production to evaluate production performance
- implement work health and safety policies in the context of the work team.

Knowledge Evidence

The candidate must demonstrate knowledge of:

- land and soil conditions
- effects of nutrients of soil types
- crop and pasture production financial analysis techniques
- environmental standards

- cultivation requirements for different types of crop
- safe handling processes for fertilisers
- role of technology in improving efficiency
- infestation patterns for different types of weed
- work health and safety legislation codes of practice and enterprise procedures.

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.

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