Modification history

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| Release | Comments |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0. |

| AHCPHT409 | Develop a crop regulation program |
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| Application | This unit of competency describes the skills and knowledge required to assess, develop, document and monitor a crop regulation program.  The unit applies to individuals who apply specialist skills and knowledge to developing a crop regulation program. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.  All work is carried out to comply with workplace procedures, health and safety in the workplace requirements, legislative and regulatory requirements, and sustainability and biosecurity practices.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Production Horticulture (PHT) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Assess crop regulation methods | 1.1 Identify production targets and requirements, including quantity, quality and availability of specified crops  1.2 Research the characteristics and growing requirements of plant species and cultivars that may affect the crop regulation program  1.3 Assess the benefits and limitations of available crop regulation methods for specified crops  1.4 Identify hazards and assess risks associated with program, and develop, document and cost control measures to manage risks according to workplace health and safety procedures  1.5 Determine cost-effective approach to crop regulation, and submit to management for approval |
| 2. Identify the requirements of a crop regulation program | 2.1 Develop crop regulation program to achieve appropriate yield and quality  2.2 Identify and confirm availability of resources, tools, equipment and machinery for the program  2.3 Outline staged implementation and development according to the range of conditions during the growing cycle  2.4 Determine timelines for crop regulation activities, taking into account the needs of the crop and site conditions |
| 3. Prepare and document the crop regulation program and specifications | 3.1 Prepare and document the crop regulation plan, specifications and quotation based on the requirements of the program  3.2 Develop and document on-site procedures and schedule of activities for the program |
| 4. Monitor the crop regulation program | 4.1 Communicate the crop regulation plan, specifications, on-site procedures and schedule of activities to staff  4.2 Monitor program implementation to ensure requirements of the production plan are achieved  4.3 Review and refine program to ensure it is responsive to changing conditions  4.4 Identify non-compliance with documented objectives and specifications, and implement remedial actions to alleviate or overcome identified shortcomings in program  4.5 Identify and document remediation action, and report to management |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| Reading | * Identify and interpret information regarding requirements for crop regulation program and plan |
| Oral communication | * Initiate discussions with management, using clear language to discuss program requirements, quotation and crop regulation plan * Initiate discussions with staff, using clear language and standard industry terminology to communicate crop regulation plan, specifications, on-site procedures and schedule of activities |
| Numeracy | * Calculate labour, materials, tools, equipment and risk control cost |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCPHT409 Develop a crop regulation program | AHCPHT402 Develop a crop regulation program | Minor changes to application  Major changes to performance criteria  Foundation skills added  Assessment requirements updated | Not equivalent |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet: <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72> |

| TITLE | Assessment requirements for AHCPHT409 Develop a crop regulation program |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.  There must be evidence that the individual has developed a crop regulation program on at least one occasion, and has:   * assessed and selected cost-effective techniques, resources and equipment for the regulation of horticultural crops * applied relevant workplace health and safety procedures * prepared a cost-benefit analysis on available crop regulation methods * developed a crop regulation program to achieve the yield and quality specified in the workplace production plan * documented a crop regulation plan, specifications and quotation * documented detailed schedules and work procedures * monitored and reviewed the crop regulation program * implemented appropriate courses of action in response to identified shortcomings. | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:   * principles and practices for developing a crop regulation program, including: * processes and techniques for preparing, costing and documenting plans for scheduling crop regulation activities * site evaluation techniques, including analysis of the condition of soils, plants and the site for production activities * specific crop physiology and timing of regulation * the characteristics of soil and other growth media types, and the use of additives to enhance the available nutrition for specific plant species and cultivars * the relationship between workplace crop regulation methods, including thinning, pruning and regulated deficit irrigation (RDI), and the yield and quality of specific crops * crop regulation published data on the species and cultivars * workplace requirements applicable to health and safety in the workplace for developing a crop regulation program. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * a workplace setting or an environment that accurately represents workplace conditions * resources, equipment and materials: * crop production plan * crop regulation published data on the species and cultivars * industry publications and internet sources of information relevant to developing a crop regulation program * specifications: * workplace requirements applicable to health and safety in the workplace for developing a crop regulation program * relationships: * staff and management * timeframes: * according to job requirements.   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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