Modification history

| Release | Comments |
| --- | --- |
| Release 2 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 3.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCBEK407 | Rear queen bees  |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to rear queen bees and queen cells through the manipulation of hives.The unit applies to experienced beekeepers who exercise judgement to complete a range of specialist activities requiring a thorough understanding in honey production. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems.No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication |
| Prerequisite unit | Nil |
| Unit sector | Beekeeping (BEK) |

| Elements | Performance criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1.Establish breeding stock and obtain requirements for queen bee rearing | 1.1 Select and obtain queen bee breeding stock according to breeding program1.2 Obtain all tools and equipment required to rear queen bees1.3 Select and use personal protective equipment1.4 Identify work health and safety hazards, risks and implement controls1.5 Observe site quarantine or other biosecurity protocols according to workplace procedures  |
| 2. Assess condition of colonies and nurse bees and prepare queen cups with larvae | 2.1 Confirm all hives and colonies used for queen bee and drone production are in a clean and healthy condition2.2 Select larvae from the breeder queen bee cells for grafting according to specification2.3 Transfer larvae from worker cells into queen cell cups according to workplace procedures2.3 Ensure an adequate number of nurse bees are present in cell raising colonies2.4 Use a suitable method for cell production  |
| 3.Establish and monitor the queen mating process | 3.1 Transfer ripe queen cells into the nucleus after grafting according to workplace procedures3.2 Provide drones during mating period according to the workplace standards and specifications3.3 Monitor and maintain hives in a healthy pest and disease free condition 3.4 Maintain records of grafting and queen rearing activities according to workplace procedures3.4 Record the age of the queen removed from mating colony according to industry standards |

|  |
| --- |
| Foundation skillsThis 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. |
| Skills | Description |
| Reading | * Reads and interprets queen bee breeding procedures and specifications to determine requirements
 |
| Writing | * Accurately records and completes workplace documents and using clear language and correct spelling, grammar and terminology
 |
| Navigate the world of work | * Takes responsibility for following policies, procedures, legislative requirements and industry codes relevant to pollen collection and food health and safety
 |
| Get the work done | * Takes responsibility for planning, sequencing and prioritising tasks for queen bee production
 |

| Unit mapping information |
| --- |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCBEK407 Rear queen bees | AHCBEK407A Rear queen bees | Updated to meet Standards for Training PackagesSplit Element 1 into two for clarityMinor changes to Performance Criteria for clarity | Equivalent unit |

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

| Assessment requirements |
| --- |
| AHCBEK407 | Rear queen bees  |
| Performance evidence |
| The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting.There must be evidence that on at least one occasion the individual has demonstrated that they have reared queen bees including:* obtained queen bee breeding stock according to breeding program
* obtained tools equipment and safety requirements required for breeding manipulations
* assessed safety hazards, risks and implemented controls
* conducted all bee manipulations and activity according to biosecurity and quarantine protocols
* assessed, selected and grafted larvae into queen cells according to procedures
* assessed and maintained nutrition and health of bees and larvae
* monitor the queen mating process according to procedures
* recognised diseases, pests and disorders and took appropriate remedial action
* maintained records according to workplace and industry procedures.
 |

| Knowledge evidence |
| --- |
| 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 of rearing queen bees
* monitoring and recognising brood and adult bee health, diseases, pests and other disorders and required action
* storage requirements of queen bees
* techniques and timing for queen cell production
* optimum conditions and timing for queen rearing activities
* required number of mature, healthy and genetically suitable
* standards and protocols for selecting and manipulating bees and larvae for queen be production.
 |

| Assessment conditions |
| --- |
| Assessment of skills must take place under the following conditions: * physical conditions:
* skills must be demonstrated in an active apiary
* resources, equipment and materials:
* live bees and queen bee stock
* use of hive manipulation and larvae grafting tools
* use of specific items of personal protective equipment
* specifications:
* use of specific workplace procedures, processes and records
* use of workplace instructions and specifications
* access to legislation and codes of practice for biosecurity and queen bee breeding
* timeframes:
* according to the breeding procedures and requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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