APPLY BEE BIOLOGY KNOWLEDGE

UNIT CODE: 0811 341 01 A

TVET CDACC UNIT CODE: AGR/OS/API/CC/02/4/MA

UNIT DESCRIPTION

This unit covers the competencies required to apply bee biology knowledge. It involves identifying bee species; applying knowledge of bee lifecycle and caste and applying knowledge of bee external anatomy.

ELEMENT AND PERFORMANCE CRITERIA

ELEMENT These describe the key outcomes which make up workplace function	**PERFORMANCE CRITERIA** These are assessable statements which specify the required level of performance for each of the elements. ***Bold and italicized termsare elaborated in the Range***
1. Identify bee species	1.1 ***Honey bee species*** are identified based on taxonomic classification 1.2 ***Honey bee sub-species*** are identified based on taxonomic classification 1.3 ***Honey bee races*** are identified based on geographical origin
2. Apply knowledge of bee lifecycle and caste	2.1 ***Bee castes*** are identified based on roles 2.2 Bee developmental stages are applied as per National Bee Keeping Manual 2.3 Bee lifecycle is applied according to bee development stages
3. Apply knowledge bee external anatomy	3.1 Queen bee external anatomy is identified based on taxonomic classification 3.2 Drone bee external anatomy is identified based on taxonomic classification 3.3 Worker bee external anatomy is identified based on taxonomic classification

RANGE

This section provides a work environment and conditions to which the performance criteria apply. It allows for a different work environment and situations that will affect performance.

Variable	Range
1. Honey bee species may include but not limited to:	1.1 Apis mellifera 1.2 Apisflorea 1.3 Apisdorseta
2. Honey bee sub-species may include but not limited to:	2.1 Carniolan honey bee 2.2 Apismelliferasimensis 2.3 Apismelliferaadansonii 2.4 East African lowland honey bee 2.5 European dark bee 2.6 Caucasian honey bee
3. Honey bee races may include but not limited to:	3.1 European honey bee 3.2 African wild bee 3.3 Italian honey bee 3.4 German black bee
4. Honey bee castes may include but not limited to:	4.1 Queen bee 4.2 Drone 4.3 Worker bee 4.4 Brood

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills

The individual needs to demonstrate the following skills:

- Organizing skills
- Analytical skills
- Interpersonal skills
- Communication skills
- Evaluation skills
- Problem solving
- Critical thinking

Required Knowledge

The individual needs to demonstrate knowledge of:

- Types of bees
- Types of PPE
- Lifecycle
- Caste system
- Physiological systems of bees

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

1. Critical aspects of Competency	1.1 Identifiedhoney bee species based on taxonomic classification 1.2 Identifiedhoney bee sub-species based on taxonomic classification 1.3 Identifiedhoney bee races based on geographical origin 1.4 Identifiedbee castes based on roles 1.5 Applied bee lifecycle according to bee development stages 1.6 Identified bee external anatomy based on taxonomic classification
2. Resource Implications	The following resources should be provided: 2.1 Appropriately simulated environment where assessment can take place. 2.2 Access to relevant assessment environments. 2.3 Resources relevant to the proposed assessment activity or tasks.
3. Methods of Assessment	Competency in this unit may be assessed through: • Practical • Project • Written tests • Third party report • Portfolio of evidence • Oral questions
4. Context of Assessment	This competency maybe assessed in a workplace or in a

	simulated workplace.
5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.