

PRODUCE ORNAMENTAL FISH

ISCED UNIT CODE: 0831 451 06A

TVETCDACC UNIT CODE: AQ/OS/AM/CR/02/5/MA

UNIT DESCRIPTION

This unit covers the competencies required in the production of ornamental fish. It involves Breeding fresh water and marine water ornamental fish, constructing aquarium tanks and carrying out aqua capping.

ELEMENT AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
These describe the key outcomes that make up workplace function	These are assessable statements that specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the Range</i>
1. Breed fresh water and marine water ornamental fish	1.1 <i>Selection of ornamental fish brooders</i> is carried as per ornamental fish breeding manual 1.2 <i>Breeding unit water is conditioned</i> as per ornamental fish breeding manual 1.3 Ornamental fish brooders are paired according to ornamental fish breeding manual 1.4 Fertilized ornamental fish eggs are incubated as per ornamental fish breeding manual 1.5 Ornamental fish hatchlings are stocked as per ornamental fish breeding manual
2. Construct aquarium tanks	2.1 PPEs are worn according to work requirement 2.2 <i>Tools, materials and equipment</i> are selected as per the work requirement 2.3 Aquaria is designed as per fish aquaria construction manual 2.4 Glass sheets are cut according to desired sizes as per fish aquaria construction manual 2.5 Cut glass sheets are mounted as per fish aquaria construction manual

	2.6 Constructed aquaria leakages are test run as per fish aquaria construction manual
3. Carry out aqua scaping	3.1 PPEs are worn according to work requirement 3.2 Tools and equipment are selected as per work requirement 3.3 Aquaria layout is designed as per fish aquaria construction manual 3.1 <i>Aquascaping materials</i> are installed as per fish aquaria construction manual 3.2 <i>Aquascaping styles</i> are implemented as per fish aquaria construction manual

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
Selection of ornamental fish brooders include but are not limited to:	Selection is based on the following 1. 1 Type Species 1. 2 Intensity of colour 1. 3 Reproduction mode 1. 4 Courtship behaviour 1. 5 Type of eggs produced
Breeding unit water is conditioned include but are not limited to:	2.1 Dechlorination 2.2 Degassing 2.3 Aeration 2.4 Temperature stabilization 2.5 pH control
Tools, materials and equipment include but are not limited to:	3.1 Breeding tanks 3.2 Thermostat heaters 3.3 Kakabans/Egg trays 3.4 Graders 3.5 Suction pipes, 3.6 Desiccators, 3.7 Dechlorinators 3.8 Magnetizers 3.9 Aquarium lighting

	3.10 Aquarium filters 3.11 Submersible pump
Aquascaping materials include but are not limited to:	4.1 Aqua Soils 4.2 Artificial/Natural Aquatic Plants 4.3 Aquarium driftwood 4.4 Aquarium rocks 4.5 Aquarium substrate 4.6 Gravel 4.7 Wall papers
Aquascaping styles include but are not limited to:	The following aquascaping styles can be used; 5.1 Dutch 5.2 Jungle 5.3 Iwagumi 5.4 Nature Aquarium

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:

- Intensive and selective catching techniques
- broodstock management and captive breeding
- Aquarium tank fabrication
- Glass plane cutting technique
- Sealants application skills
- Aquascaping techniques
- Fish feeds storage

Required Knowledge

The individual needs to demonstrate knowledge of:

- Freshwater ornamental fishes
- Breeding protocol and management methods
- Ornamental fish breeding techniques
- Types of sealants
- Principles of Aquascaping
- Aquascaping design and styles
- Ornamental feeding procedures
- Fish nutritional requirements

- Types of feeds and feeding methods
- Fish feeding ingredients
- Ornamental fish diseases

EVIDENCE GUIDE

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

Critical aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ol style="list-style-type: none"> 1.1 Conditioned breeding unit water <i>is</i> as per ornamental fish breeding manual 1.2 Paired ornamental fish brooders according to ornamental fish breeding manual 1.3 Fertilized incubated ornamental fish eggs as per ornamental fish breeding manual 1.4 Stocked ornamental fish hatchlings as per ornamental fish breeding manual 1.5 Designed aquaria as per fish aquaria construction manual 1.6 Cut glass sheets according to desired sizes as per fish aquaria construction manual 1.7 Mounted cut glass sheet as per fish aquaria construction manual 1.8 Test run constructed aquaria leakages as per fish aquaria construction manual 1.9 Designed aquaria layout as per fish aquaria construction manual 1.10 Installed <i>aquascaping materials</i> as per fish aquaria construction manual 1.11 Implemented <i>aquascaping styles</i> as per fish aquaria construction manual
Resource Implications	<p>The following resources should be provided:</p> <ol style="list-style-type: none"> 2.1 An 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.

Methods of Assessment	Competency may be assessed through: 3.1 Practical 3.2 Project 3.3 Third party report 3.4 Portfolio of evidence 3.5 Written tests 3.6 Oral questioning
Context of Assessment	4.1 This competency may be assessed in a work place or in a simulated work place.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.