

Title	Describe and carry out cryopreservation of milt on an aquaculture facility		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to: describe and carry out cryopreservation of milt on an aquaculture facility.
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Classification	Seafood > Aquaculture
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Available grade	Achieved
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Guidance Information

- Legislation relevant to this unit standard includes but is not limited to:
 - Animal Products Act 1999;
 - Health and Safety at Work Act 2015;
 - and any subsequent amendments.
- Definitions
Company requirements refer to instructions to staff on policy and procedures that are communicated in an oral or written form. These requirements must include legislative requirements and company safety procedures, and may include but are not limited to – industry codes of practice and standards. Company requirements must include legislative requirements.
Dewar refers to a liquid nitrogen container which houses the straws of frozen milt.
- Recommended:
 Unit 19851, *Demonstrate knowledge of the biology of fin fish*, and Unit 20464, *Prepare for and carry out spawning of brood stock for an aquaculture species* or demonstrate equivalent knowledge and skills.
- All evidence presented in this unit standard must be in accordance with company requirements.

Outcomes and performance criteria

Outcome 1

Describe cryopreservation of milt on a commercial aquaculture facility.

Performance criteria

- Describe the purpose of cryopreservation of milt in terms of its application on an aquaculture facility.

- 1.2 Describe equipment and resources in terms of laboratory preparation and use in the cryopreservation process.

Range may include but is not limited to – cryopreservation chemicals/resources, chilling equipment, labelled straws, cellulose, test tubes, Dewar.

- 1.3 Describe potential hazards of handling liquid nitrogen and cryopreservation chemicals, safe handling practices and remedial action to minimise the risk of hazards.

Range potential hazards include – low temperature burns, saturation burns, asphyxiation;
safe handling practices include but are not limited to – wearing protective footwear and clothing.

- 1.4 Describe the process of collecting milt for cryopreservation.

Range may include but is not limited to – male ripeness, use of a catheter, mid-stream collection.

- 1.5 Describe the process of assessing milt quality prior to freezing.

- 1.6 Describe the steps required to correctly freeze milt.

Outcome 2

Carry out cryopreservation of milt on an aquaculture facility.

Performance criteria

- 2.1 Prepare equipment and resources.
- 2.2 Collect milt and assess quality.
- 2.3 Freeze milt that meets the company's quality assessment standards.
- 2.4 Record labelled straws containing frozen milt and their location in the Dewar.

Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 September 2008	31 December 2024
Review	2	28 October 2021	N/A
Rollover	3	29 February 2024	N/A

Consent and Moderation Requirements (CMR) reference

0123

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard.