

Demonstrate knowledge of, and carry out, cryopreservation of milt on an aquaculture facility

Level 4

Credits 5

Purpose People credited with this unit standard are able to: demonstrate knowledge of cryopreservation of milt; and carry out cryopreservation of milt, on an aquaculture facility.

Subfield Seafood

Domain Aquaculture

Status Registered

Status date 19 September 2008

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Entry information Recommended: Unit 19851, *Describe the biology of a fin fish*, and Unit 20464, *Prepare for and carry out spawning of broodstock for an aquaculture species* or demonstrate equivalent knowledge and skills.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Primary Industry Training Organisation

Accreditation and Moderation Action Plan (AMAP) reference 0123

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

Special notes

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.

Dewar refers to a liquid nitrogen container which houses the straws of frozen milt.

Elements and performance criteria

Element 1

Demonstrate knowledge of cryopreservation of milt on a commercial aquaculture facility.

Performance criteria

- 1.1 The purpose of cryopreservation is explained in terms of its application on an aquaculture facility.
- 1.2 Equipment and resources are explained 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 Potential hazards of handling liquid nitrogen and cryopreservation chemicals are identified, and safe handling practices and remedial action to minimise the risk of hazards are described in accordance with company requirements.
- 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 The process of collecting milt for cryopreservation is described in accordance with company requirements.
- Range may include but is not limited to – male ripeness, use of a catheter, mid stream collection.
- 1.5 The process of assessing milt quality prior to freezing is described in accordance with company requirements.
- 1.6 The steps required to correctly freeze milt are described in accordance with company requirements.

Element 2

Carry out cryopreservation of milt on an aquaculture facility.

Performance criteria

- 2.1 Equipment and resources are prepared in accordance with company requirements.
- 2.2 Milt is collected and quality assessed in accordance with company requirements.

- 2.3 Milt that meets the company's quality assessment standards are frozen in accordance with company requirements.
- 2.4 Labelled straws containing frozen milt and the location in the Dewar are recorded in accordance with company requirements.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Primary Industry Training Organisation at standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.