

Demonstrate knowledge of somatic cell count (SCC), and mastitis in dairy cows

Level 2

Credits 6

Purpose People credited with this unit standard are able to demonstrate knowledge of: somatic cell count (SCC); mastitis; and mastitis treatments, in dairy cows.

Subfield Agriculture

Domain Dairy Farming

Status Registered

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Entry information Open.

Accreditation Evaluation of documentation by NZQA and industry.

Standard setting body (SSB) Primary Industry Training Organisation

Accreditation and Moderation Action Plan (AMAP) reference 0052

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

Special notes

- 1 Legislation includes but is not limited to – Health and Safety in Employment Act 1992, Animal Products Act 1999, Animal Welfare Act 1999, Food Act 1981, Agricultural Compounds and Veterinary Medicines Act 1997.
- 2 References
NZCP-1, New Zealand Dairy Industry Farm Dairy Code of Practice, New Zealand Food Safety Authority, ISBN 0-908946-00-7, referred to as the code of practice.
DPC 2: Animal Products (Dairy) Approved Criteria for Farm Dairies, referred to as DPC 2. Available from the NZ Food Safety Authority website, <http://www.nzfsa.govt.nz>.
National Mastitis Advisory Committee, *SAMM Plan, Explanatory Booklet*, Revised, March 2006, available from Livestock Improvement, <http://www.lic.co.nz>, or Dexcel Limited, <http://www.dexcel.co.nz>.
Managing Mastitis: A practical guide for New Zealand dairy farmers, 3rd Edition, available from Livestock Improvement, <http://www.lic.co.nz>.

Elements and performance criteria

Element 1

Demonstrate knowledge of somatic cell count (SCC) in dairy cows.

Performance criteria

1.1 Somatic cells are described in terms of their function in the udder, and the factors that can affect SCC.

Range evidence is required for at least six factors.

1.2 The presence of mastitis is described in terms of its relationship with SCC.

Element 2

Demonstrate knowledge of mastitis in dairy cows.

Performance criteria

2.1 Mastitis is described in terms of the signs, effects on the cow, and prevalence according to season.

Range clinical, subclinical.

2.2 Mastitis is described in terms of the causes.

Range major bacteria capable of causing clinical mastitis – cow associated (or contagious), environmental mastitis bacteria; minor bacteria causing slight to moderate increases in SCC; over milking, under milking.

2.3 Mastitis is described in terms of the economic effects.

Range on production, on product quantity and quality, at farm level, at manufacturing level.

2.4 Mastitis is described in terms of methods for on-farm detection, and subsequent management of affected cows.

Range individual cows, at herd level, the colostrum mob.

2.5 Mastitis is described in terms of the tests that can be applied to milk.

Range rapid mastitis test, conductivity test, SCC test, bacteria test, antibiotic sensitivity.

Element 3

Demonstrate knowledge of mastitis treatments.

Performance criteria

- 3.1 Mastitis is described in terms of treatments and withholding times.
- Range lactating cow antibiotic treatments, dry cow antibiotic treatments; supportive treatments – milking before treating, intramuscular treatments, udder massage, let-down hormone, homeopathy, herbal treatment.
- 3.2 Mastitis is described in terms of the cost-benefit of treatment.
- Range clinical, subclinical.
- 3.3 Mastitis is described in terms of the requirements for recording as specified in DPC 2.

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 standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.