

Analyse soil health status, and determine on-farm strategies for improvement

Level 4

Credits 5

Purpose People credited with this unit standard are able to: evaluate soil health status of soil types; and analyse the factors contributing to, and determine strategies to improve, the health status of soil.

Subfield Agriculture

Domain General Agriculture

Status Registered

Status date 20 May 2008

Date version published 20 May 2008

Planned review date 31 December 2013

Entry information Open.

Replacement information This unit standard, unit standard 24542, and unit standard 24543 replaced unit standard 19144.

Accreditation Evaluation of documentation and visit by NZQA, industry and teaching professional in the same field from another provider.

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 Resources – Visual Soil Assessment, Volume 1-4, ISBN 1-877221-92-9.
- 2 Reference
Code of Practice for Nutrient Management, New Zealand Fertiliser Manufacturer's Research Association Incorporated (NZFMRA), 2007, available from <http://www.fertresearch.org.nz>.
- 3 Farm management objectives must be provided to the candidate for assessment of element 3.

Elements and performance criteria

Element 1

Evaluate soil health status of soil types.

Range evidence is required for at least two soil types.

Performance criteria

1.1 Soil health status is evaluated in relation to soil characteristics.

Range soil characteristics – physical structure, colour, insect and worm population, texture, porosity, mottling, fertility, bulk density.

Element 2

Analyse the factors contributing to the health status of soil on-farm.

Range evidence is required for the two soil types assessed in element 1.

Performance criteria

2.1 Health status of soil is analysed to determine the effect of contributing factors.

Range cultivation methods, crop rotation programme, stock grazing system, stock management, fertiliser and liming programme, machinery use;
natural and climatic factors include but are not limited to – drought, flood, fire, wind, snow, frost, erosion, salination.

Element 3

Determine strategies to improve the health status of soil on-farm.

Range evidence is required for the two soil types assessed in element 1.

Performance criteria

3.1 Strategies are consistent with farm management objectives.

3.2 Strategies are environmentally sustainable.

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.