

This assessment report is based on assessments for 2023. It may not reflect achievement standards that have been updated.

2023 NCEA Assessment Report

Subject:	Agricultural and Horticultural Science
Level:	Level 1
Achievement standard(s):	91930, 91931

General commentary

Both standards gave candidates the opportunity to demonstrate their understanding of management practices used in their chosen primary production system. Successful candidates demonstrated their understanding by linking a management practice to their specific primary production system. They were able to articulate the rationale for using the management practice.

Candidates were expected to demonstrate their understanding of a chosen Māori value. In some cases, candidates were able to embed their understanding in their rationale for using a management practice. In some cases, the chosen Māori value was named at the end of the explanation without being linked to the management practice or the primary production systems.

Report on individual achievement standard(s)

Achievement standard 91930: Demonstrate understanding of how soil properties are managed in a primary production system

Assessment

The assessment consisted of three questions to be answered on a digital platform. Candidates were required to respond to all three using a primary production system of their choice. Candidates could discuss a Māori value other than the examples provided.

Each question assessed either a physical, chemical or a biological property of soil. Candidates were expected to demonstrate their understanding of how a practice was applied to the management of soil properties.

Commentary

Candidates who achieved well, presented their answer in a logical manner by connecting their management practice to the primary production of their choice. They also demonstrated their understanding of a chosen Māori value by discussing how they managed soil properties in their primary production system. In some cases, the value was not named but an understanding was embedded in the response.

Candidates were expected not only to demonstrate understanding of the process but also the rationale behind carrying out the management practice.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- included one or two aspects of soil properties
- omitted to describe how or why a management practice improved plant growth
- showed understanding of management practice but made limited links to the production system
- linked management practices to Māori values.

Candidates who were awarded **Achievement with Merit** commonly:

- chose a management practice and primary production system that were well suited for analysis
- made links between management practices, soil properties, and improving plant growth
- provided evidence of understanding of how or why a practice is appropriate.

Candidates who were awarded **Achievement with Excellence** commonly:

- recognised logical links between management practice, soil properties, and plant growth
- presented pros and cons, or comparative factors
- presented a clear “big picture” of what soil management is trying to achieve
- linked management practices to a chosen production system.

Candidates who were awarded **Not Achieved** commonly:

- did not discuss soil properties
- chose a management practice that did not allow for demonstration of candidate understanding about management of soil properties
- provided evidence of understanding of agriculture / horticulture aspects but no evidence of Māori values.

Achievement standard 91931: Demonstrate understanding of sustainability considerations that influence primary production

Assessment

The assessment consisted of a prompt with supporting questions to be answered in the form of a report and submitted to the NZQA submission portal. Candidates were required to write a report using a primary production system of their choice to demonstrate understanding of how a management practice helps the sustainability of water. Candidates were expected to choose and apply knowledge of an appropriate Māori value in the response. The format of this assessment did not require references from external resources.

Commentary

Candidates who achieved well, presented their answer in a logical manner by connecting the management practice to water sustainability of their primary production system. Candidates also did well if they gave evidence of big picture thinking, as well as details in their response rather than a basic description of management practices.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- described in basic terms how their primary production system impacted on water sustainability
- described how farmers and growers consider water sustainability when using the management practice.

Candidates who were awarded **Achievement with Merit** commonly:

- explained the importance and relevance of water sustainability
- were able to explain and link the management practice clearly to water sustainability, using scientific connections
- used several dimensions to explain management practices.

Candidates who were awarded **Achievement with Excellence** commonly:

- used both detail and big picture understanding to place the management practice in a production context
- compared practices and explained the positives and negatives of each practice
- explained, using detail, which management practice had the greatest impact on water sustainability.

Candidates who were awarded **Not Achieved** commonly:

- described management practices unrelated to water sustainability
 - used incorrect subject-specific vocabulary
 - did not include a Māori value or the Māori value was explained incorrectly
 - gave responses lacking details regarding water sustainability considerations.
-