

Title	Demonstrate knowledge of plant tissues		
Level	4	Credits	4

Purpose	People credited with this unit standard are able to: describe the cell types, organisation, and functions of the primary tissues in a plant; and locate cell types and primary tissue of a plant.
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Classification	Science > Biology
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Available grade	Achieved, Merit, and Excellence
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Guidance Information

- 1 Recommended skills and knowledge: Unit 8029, *Work safely in a microbiological laboratory*.
- 2 All work must be carried out in accordance with the quality management system, documented protocol system or Standard Operating Procedures acceptable in a commercial or research laboratory.
- 3 Health and Safety practices must conform to Australian/New Zealand Standard AS/NZS 2243:2010 Set – *Safety in Laboratories*, available at <http://www.standards.co.nz> and <http://infostore.saiglobal.com/store>.
- 4 Legislation applicable to this unit standard includes:
Health and Safety at Work Act 2015;
Hazardous Substances and New Organisms Act 1996.

Outcomes and performance criteria

Outcome 1

Describe the cell types, organisation, and functions of the primary tissues in a plant.

Range six of – collenchyma, sclerenchyma, epidermal, parenchyma, guard, vessel element, tracheid, sieve tube element, endodermal, cambium.

Performance criteria

- 1.1 Cell types are described in terms of their structure, function, and organisation into tissues.
- 1.2 Labelled outline diagrams are drawn to describe the structure of cells.

Outcome 2

Locate cell types and primary tissue of a plant.

Range one each of – leaf, stem, root.

Performance criteria

2.1 Cell types and primary tissues in views of plant organs are identified and located.

Range plant organs – sectional views, wet-mount section.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	30 January 1997	31 December 2014
Revision	2	19 February 1998	31 December 2014
Review	3	23 November 1999	31 December 2014
Review	4	21 May 2010	31 December 2022
Rollover	5	27 January 2015	31 December 2022
Rollover and Revision	6	15 June 2017	31 December 2022
Revision	7	26 October 2017	31 December 2022
Review	8	22 October 2020	31 December 2022

Consent and Moderation Requirements (CMR) reference	0113
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.