Achievement Standard

Subject Reference	Agricultural and Horticultural Science 1.9				
Title	Demonstrate knowledge of basic plant propagation techniques				
Level	1	**Credits**	4	**Assessment**	Internal
Subfield	Science				
Domain	Agricultural and Horticultural Science				
Status	Registered	**Status date**		17 December 2010	
Planned review date	31 December 2014	**Date version published**		17 December 2010	

This achievement standard involves knowledge and understanding of basic plant propagation techniques.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Demonstrate knowledge of basic plant propagation techniques.	• Demonstrate in-depth knowledge of basic plant propagation techniques.	• Demonstrate comprehensive knowledge of basic plant propagation techniques.

Explanatory Notes

1 This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, and based on the outcomes in the *Teaching and Learning Guide for Agricultural and Horticultural Science*, Ministry of Education, 2010 at http://seniorsecondary.tki.org.nz/.

2 *Demonstrate knowledge* involves describing the steps taken when performing basic plant propagation techniques to provide conditions important for successful propagation.

Demonstrate in-depth knowledge involves explanation of how basic plant propagation techniques provide conditions important for successful propagation.

Demonstrate comprehensive knowledge involves applying knowledge of basic plant propagation techniques or steps within techniques to provide conditions important for successful propagation. This will involve comparing and contrasting or justifying the use of these techniques or steps within techniques.

3 *Basic propagation techniques* must include sexual propagation (sowing seeds in containers and outdoors) and asexual propagation (cuttings [named type of stem or leaf]; division; and ground layering).

4 Conditions important for successful propagation refer to both environmental and biological conditions.

5 Environmental conditions include water, oxygen, warmth, bottom heat, high humidity, time of year and light.

6 Biological conditions include viable seed, plant type, plant material and plant health.

7 Conditions of Assessment related to this achievement standard can be found at www.tki.org.nz/e/community/ncea/conditions-assessment.php.

Quality Assurance

1 Providers and Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against achievement standards.

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

Accreditation and Moderation Action Plan (AMAP) reference 0233