

## Achievement Standard

<b>Subject Reference</b>	Agricultural and Horticultural Science 2.2		
<b>Title</b>	Demonstrate understanding of techniques used to modify physical factors of the environment for NZ plant production		
<b>Level</b>	2	<b>Credits</b>	4
		<b>Assessment</b>	External
<b>Subfield</b>	Science		
<b>Domain</b>	Agricultural and Horticultural Science		
<b>Status</b>	Registered	<b>Status date</b>	17 November 2011
<b>Planned review date</b>	31 December 2020	<b>Date version published</b>	20 November 2014

This achievement standard involves demonstrating understanding of techniques used to modify physical factors of the environment for commercial plant production in New Zealand.

### Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> <li>Demonstrate understanding of techniques used to modify physical factors of the environment for commercial plant production in New Zealand.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate in-depth understanding of techniques used to modify physical factors of the environment for commercial plant production in New Zealand.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate comprehensive understanding of techniques used to modify physical factors of the environment for commercial plant production in New Zealand.</li> </ul>

### Explanatory Notes

- This achievement standard is derived from *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, and is related to the material in the *Teaching and Learning Guide for Agricultural and Horticultural Science*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.
- Demonstrate understanding* involves describing how techniques modify physical factors of the environment for commercial plant production in New Zealand.

*Demonstrate in-depth understanding* involves explaining how the use of techniques influences commercial plant production in New Zealand.

*Demonstrate comprehensive understanding* involves evaluating techniques used to modify physical factors in terms of economic and/or environmental and/or social impact of commercial plant production in New Zealand. This may involve comparing and contrasting or justifying the use of the techniques.

- 3 *Physical factors* are selected from frost, wind, light, temperature, water, humidity, air, and soil.
  - 4 *Plant production* relates to crop yield, quality, and timing.
  - 5 This achievement standard is suitable for agricultural or horticultural contexts.
  - 6 Assessment Specifications for this achievement standard can be accessed through the Agricultural and Horticultural Science Resources page found at <http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/>.
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### **Replacement Information**

This achievement standard replaced AS90451.

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### **Quality Assurance**

- 1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference

0233