

# **ASSESSMENT GUIDELINES**

## **Unit 21215**

Manage the harvest of a fruit crop

---

Level 5, Credit 15, version 2

# Manage the harvest of a fruit crop

## Unit standard 21215

Level 5, Credit 15, version 2

### Level of performance required for this unit standard

This is a level 5 unit standard. At this level trainees are expected to demonstrate the following abilities when completing assessment tasks:

- To work within broad general guidelines; with responsibility for the achievement and standard of the outcome.
- To apply a wide range of technical skills, knowledge, and innovation to complete the task to the specified standard, in a variety of familiar and unfamiliar, routine and non-routine contexts.
- To analyse and interpret a wide range of data, and make an informed judgment.

### Workplace assessment:

For guidelines on Workplace Assessment, please refer to the NZHITO Workplace Assessors Manual, and for further information, please contact: NZHITO, PO Box 8638, Christchurch. Ph 03 9644 735, fax 03 9644 737, website [www.hortito.org.nz](http://www.hortito.org.nz)

### Special notes:

- 1 *Workplace procedures* refer to verbal or written instructions to staff on procedures for the worksite and equipment.
- 2 Legislation relevant to this unit standard includes but is not limited to the Health and Safety in Employment Act 1992, and the Resource Management Act 1991.
- 3 This unit standard is not intended to cover grapes. People working, or intending to work, in viticulture may complete Unit 19937, *Perform field nursery activities*.

## Unit 21215: Manage the harvest of a fruit crop (Apprentice copy)

<b>ELEMENT</b>	<b>Competent</b>	<b>Range of evidence an assessor should consider</b>
<b>Element 1</b> Determine crop quality and yield	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Assess crop yield by measurements and estimates made in the field.</li> <li>Assess crop quality by testing the quality parameters before harvest. These may include but is not limited to – brix level, flesh firmness, skin colour, starch level.</li> </ul>
<b>Element 2</b> Determine crop readiness	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Take pre-harvest samples and test them or give or send them to the laboratory/marketing agent to determine the maturity of the crop. Testing may include but is not limited to – crop appearance, specification charts, aids or devices including penetrometers and refractometers, and external assessments carried out by industry specialists.</li> <li>Monitor the weather patterns to assist in estimating the rate of ripening.</li> <li>Monitor the crop maturity to anticipate when the crop will be at its optimum and when the harvest will begin.</li> </ul>
<b>Element 3</b> Plan a harvest strategy	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Estimate the harvest commencement date and time span for harvest so that the crop will be harvested in optimum condition.</li> <li>Calculate the equipment and labour resources required for harvest from the size of the crop and time limitations on the harvest.</li> <li>Analyse the equipment and labour resources required against those available in the workplace and determine the amount of labour and equipment to be contracted.</li> <li>Plan for the equipment required for harvest in order that it is ready at the appropriate time.</li> <li>Plan for the pre-harvest pest control treatments, if necessary, according to manufacturers, market, and workplace requirements.</li> <li>Determine the order of crop harvest according to crop maturity and quality constraints.</li> </ul>
<b>Element 4</b> Inform staff of workplace hazards	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Inform people involved in harvesting of OSH hazards that may be present, their responsibilities for action, and the systems that are in place to deal with such hazards according to regulatory and workplace requirements.</li> </ul>
<b>Element 5</b> Manage containers and dispatch of the crop from the field	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Locate fruit bins or other containers within the orchard to enable efficient harvesting.</li> <li>Provide sufficient fruit bins or other containers to ensure efficient harvest and flow of crop.</li> <li>Store harvested crop temporarily in structures, as required, that meet market needs and workplace requirements.</li> <li>Evaluate resources required for crop transport, and engage contractors where required.</li> </ul>
<b>Element 6</b> Implement the harvest strategy	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Weather permitting, apply pre-harvest pest control treatments, as necessary, according to workplace requirements and harvesting plan.</li> <li>Organise all labour and equipment required for the harvest to be ready and available at the scheduled place and time.</li> <li>Begin the harvest at the scheduled time as determined by the market requirements and workplace procedures.</li> <li>Monitor the harvesting operations regularly and adjust them to allow for weather, contracting and equipment maintenance needs.</li> <li>Instruct truck, tractor and harvest operators on procedures to deliver each crop load at maximum quality possible.</li> <li>Monitor the crop for quality during harvest and give instructions to harvest operators as necessary.</li> </ul>

\_\_\_\_\_ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 21215 (version 2)

**Signed (Assessor):** \_\_\_\_\_

WPA Registration Number: \_\_\_\_\_ Date: \_\_\_\_\_

## Unit 21215: Manage the harvest of a fruit crop (Assessor copy)

<b>ELEMENT</b>	<b>Competent</b>	<b>Range of evidence an assessor should consider</b>
<b>Element 1</b> Determine crop quality and yield	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Assess crop yield by measurements and estimates made in the field.</li> <li>Assess crop quality by testing the quality parameters before harvest. These may include but is not limited to – brix level, flesh firmness, skin colour, starch level.</li> </ul>
<b>Element 2</b> Determine crop readiness	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Take pre-harvest samples and test them or give or send them to the laboratory/marketing agent to determine the maturity of the crop. Testing may include but is not limited to – crop appearance, specification charts, aids or devices including penetrometers and refractometers, and external assessments carried out by industry specialists.</li> <li>Monitor the weather patterns to assist in estimating the rate of ripening.</li> <li>Monitor the crop maturity to anticipate when the crop will be at its optimum and when the harvest will begin.</li> </ul>
<b>Element 3</b> Plan a harvest strategy	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Estimate the harvest commencement date and time span for harvest so that the crop will be harvested in optimum condition.</li> <li>Calculate the equipment and labour resources required for harvest from the size of the crop and time limitations on the harvest.</li> <li>Analyse the equipment and labour resources required against those available in the workplace and determine the amount of labour and equipment to be contracted.</li> <li>Plan for the equipment required for harvest in order that it is ready at the appropriate time.</li> <li>Plan for the pre-harvest pest control treatments, if necessary, according to manufacturers, market, and workplace requirements.</li> <li>Determine the order of crop harvest according to crop maturity and quality constraints.</li> </ul>
<b>Element 4</b> Inform staff of workplace hazards	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Inform people involved in harvesting of OSH hazards that may be present, their responsibilities for action, and the systems that are in place to deal with such hazards according to regulatory and workplace requirements.</li> </ul>
<b>Element 5</b> Manage containers and dispatch of the crop from the field	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Locate fruit bins or other containers within the orchard to enable efficient harvesting.</li> <li>Provide sufficient fruit bins or other containers to ensure efficient harvest and flow of crop.</li> <li>Store harvested crop temporarily in structures, as required, that meet market needs and workplace requirements.</li> <li>Evaluate resources required for crop transport, and engage contractors where required.</li> </ul>
<b>Element 6</b> Implement the harvest strategy	<b>Yes/No</b>	<ul style="list-style-type: none"> <li>Weather permitting, apply pre-harvest pest control treatments, as necessary, according to workplace requirements and harvesting plan.</li> <li>Organise all labour and equipment required for the harvest to be ready and available at the scheduled place and time.</li> <li>Begin the harvest at the scheduled time as determined by the market requirements and workplace procedures.</li> <li>Monitor the harvesting operations regularly and adjust them to allow for weather, contracting and equipment maintenance needs.</li> <li>Instruct truck, tractor and harvest operators on procedures to deliver each crop load at maximum quality possible.</li> <li>Monitor the crop for quality during harvest and give instructions to harvest operators as necessary.</li> </ul>

\_\_\_\_\_ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 21215 (version 2)

**Signed (Assessor):** \_\_\_\_\_

WPA Registration Number: \_\_\_\_\_ Date: \_\_\_\_\_

Please send this page to your NZHITO Regional Manager, who will forward it to National Office to register the credits on your NZQA Record of Learning.

## **Unit 21215: Manage the harvest of a fruit crop**

---

*(Name of Apprentice)*

**is Competent in Unit Standard 21215 (version 2)**

**Signed (Assessor):**

---

WPA Registration Number: \_\_\_\_\_

Date: \_\_\_\_\_