

ASSESSMENT GUIDELINES

Unit 21044

Develop and apply an organic pest, disease, and
weed management plan for an organic crop

Level 4, Credit 20, version 1

Develop and apply an organic pest, disease, and weed management plan for an organic crop

Unit standard 21044
Level 4, Credit 10, Version 1

Level of performance required for this unit standard

This is a level 4 unit standard. At this level trainees are expected to demonstrate the following abilities when completing assessment tasks:

- To work under broad guidance, independently; with complete responsibility for the standards of the outcome achieved.
- To apply technical skills, knowledge, and innovation to complete the task to the specified standard, in a variety of familiar and unfamiliar contexts.
- To analyse and interpret available information, and make an informed judgement.

Workplace assessment:

For guidelines on Workplace Assessment, please refer to the NZHITO Workplace Assessors Manual, and for further information, please contact: NZHITO, P O Box 8638, Christchurch.
Ph 03 9644 735, fax 03 9644 737, website www.hortito.org.nz.

Special notes:

1. The following standards apply to this unit standard:
Demeter Standards, Bio Dynamic Farming and Gardening Association, PO Box 39045, Wellington Main Centre, Phone 04 589 5366, Fax 04 589 4365, <http://www.biodynamic.org.nz>;
BIO-GRO Standards, BIO-GRO New Zealand, PO Box 9693, Marion Square, Wellington, Phone 04 801 9741, Fax 04 801 9742, <http://www.bio-gro.co.nz>;
Agriquality New Zealand, Agriquality Organic Standards, <http://www.agriquality.co.nz>;
The Soil and Health Association of New Zealand (Organic Farm New Zealand), <http://www.organicnz.org>;
The New Zealand Food Safety Authority, <http://www.nzfsa.govt.nz/organics>;
NZS 8410:2003 *Organic production*, available from Standards New Zealand <http://www.standards.co.nz>.
2. Legislation relevant to this unit standard includes but is not limited to: Health and Safety in Employment Act 1992; Resource Management Act 1991, and Hazardous Substances and New Organisms Act 1996.

Unit 21044: Develop and apply an organic pest, disease, and weed management plan for an organic crop (Apprentice copy)

ELEMENT	Competent	Range of evidence an assessor should consider
<p>Element 1 Demonstrate knowledge of the criteria for selection of an organically produced crop.</p>	<p>Yes/No</p>	<ul style="list-style-type: none"> ▪ Site is evaluated for production of the crop. Range: climate, aspect, surrounding land use, past land use, distance to market, existing structures and shelter, soil profile. ▪ Demand for crop production is identified and markets determined. Range: volume of production required, quality specifications, cultivar. ▪ Cultivar choice must consider characteristics associated with successful organic crop production. Range: pest and disease resistance and tolerance, hardiness, expected volume of production. ▪ Sequential planting plan is developed for annual crops.
<p>Element 2 Use site data to plan and implement a soil and fertility management programme.</p>	<p>Yes/No</p>	<ul style="list-style-type: none"> ▪ Plan identifies existing soil characteristics. Range: soil structure, fertility, chemical residues, soil tests. ▪ Plan identifies nutritional requirements for selected crops and specifies organic methods to maximise production. Range: crop rotation, addition of organics matter, mineral fertilisers, liquid fertilisers, green manure, timing of fertiliser application. ▪ Plan specifies farm machinery and implements to minimise soil compaction. ▪ Soil and fertility management practices are implemented in accordance with the plan.
<p>Element 3 Identify pests and diseases associated with the selected crop, and plan for and carry out the management of these organisms using organic methods.</p>	<p>Yes/No</p>	<ul style="list-style-type: none"> ▪ Pests of the selected crop and type of damage they cause are identified. ▪ Plan specifies organic pest control to manage identified pests. Range: may include but is not limited to – tillage, crop rotation, companion plants, barriers, repellents, biological controls, approved chemical controls, beneficial organisms, life cycle disruption. ▪ Diseases affecting the selected crop are identified. ▪ Plan specifies suitable organic disease control methods. Range: may include but is not limited to – tillage, crop rotation, use of traps, host plants, sacrificial plants, barriers, repellents, companion plants, biological controls, approved chemical controls, beneficial organisms, life cycle disruption, timing of control methods. ▪ Plan specifies requirements for monitoring the crop and the need for control intervention. ▪ Organic pest and disease management methods are applied in accordance with the plan.
<p>Element 4 Identify weeds that will negatively affect crop development, plan for and carry out weed management in the selected crop.</p>	<p>Yes/No</p>	<ul style="list-style-type: none"> ▪ Weeds that pose a threat at each stage of the crop’s development, the type of threat, and the most appropriate method of control, are identified. ▪ Weed management plan specifies the chosen weed control methods. Range: positive and negative impacts of weed control methods must be considered. ▪ Weed control methods are implemented in accordance with the weed management plan.

(Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 21044 (version 1)

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

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ELEMENT	Competent	Range of evidence an assessor should consider
<p>Element 1 Demonstrate knowledge of the criteria for selection of an organically produced crop.</p>	<p>Yes/No</p>	<ul style="list-style-type: none"> ▪ Site is evaluated for production of the crop. Range: climate, aspect, surrounding land use, past land use, distance to market, existing structures and shelter, soil profile. ▪ Demand for crop production is identified and markets determined. Range: volume of production required, quality specifications, cultivar. ▪ Cultivar choice must consider characteristics associated with successful organic crop production. Range: pest and disease resistance and tolerance, hardiness, expected volume of production. ▪ Sequential planting plan is developed for annual crops.
<p>Element 2 Use site data to plan and implement a soil and fertility management programme.</p>	<p>Yes/No</p>	<ul style="list-style-type: none"> ▪ Plan identifies existing soil characteristics. Range: soil structure, fertility, chemical residues, soil tests. ▪ Plan identifies nutritional requirements for selected crops and specifies organic methods to maximise production. Range: crop rotation, addition of organics matter, mineral fertilisers, liquid fertilisers, green manure, timing of fertiliser application. ▪ Plan specifies farm machinery and implements to minimise soil compaction. ▪ Soil and fertility management practices are implemented in accordance with the plan.
<p>Element 3 Identify pests and diseases associated with the selected crop, and plan for and carry out the management of these organisms using organic methods.</p>	<p>Yes/No</p>	<ul style="list-style-type: none"> ▪ Pests of the selected crop and type of damage they cause are identified. ▪ Plan specifies organic pest control to manage identified pests. Range: may include but is not limited to – tillage, crop rotation, companion plants, barriers, repellents, biological controls, approved chemical controls, beneficial organisms, life cycle disruption. ▪ Diseases affecting the selected crop are identified. ▪ Plan specifies suitable organic disease control methods. Range: may include but is not limited to – tillage, crop rotation, use of traps, host plants, sacrificial plants, barriers, repellents, companion plants, biological controls, approved chemical controls, beneficial organisms, life cycle disruption, timing of control methods. ▪ Plan specifies requirements for monitoring the crop and the need for control intervention. ▪ Organic pest and disease management methods are applied in accordance with the plan.
<p>Element 4 Identify weeds that will negatively affect crop development, plan for and carry out weed management in the selected crop.</p>	<p>Yes/No</p>	<ul style="list-style-type: none"> ▪ Weeds that pose a threat at each stage of the crop’s development, the type of threat, and the most appropriate method of control, are identified. ▪ Weed management plan specifies the chosen weed control methods. Range: positive and negative impacts of weed control methods must be considered. ▪ Weed control methods are implemented in accordance with the weed management plan.

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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.

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