

ASSESSMENT GUIDELINES

Unit 10949

Describe the nature of mycorrhizal fungi and inoculate seedbed areas with mycorrhizae in a forest nursery

Level 4, Credit 3, version 3

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Unit standard 10949

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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 information, 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

Special notes:

Legislation relevant to this unit standard includes but is not limited to the: Health and Safety in Employment Act 1992, and its subsequent amendments.

**Unit 10949: Describe the nature of mycorrhizal fungi and inoculate seedbed areas with mycorrhizae in a forest nursery
(Apprentice copy)**

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Describe the nature of mycorrhizal fungi.	Yes/No	<ul style="list-style-type: none"> ▪ Identify the different types of mycorrhizal fungi with reference to the tree species with which they are predominantly associated. Range: ecto mycorrhizae, endo mycorrhizae, conifers, hardwoods. ▪ Identify the mycorrhizal fungus predominant in one forest nursery by description of its fruiting bodies. ▪ Outline the mechanism of mycorrhizal association with reference to its importance to tree health and vigour. Range: symbiosis, nutrition, carbohydrates, fungus infection, tertiary roots, exposure. ▪ Describe and identify, with an example, the root systems of a well inoculated radiata pine seedling. ▪
Element 2 Innoculate seed beds using spores contained in fruiting bodies.	Yes/No	Range: one fungus species, radiata pine. <ul style="list-style-type: none"> ▪ Identify the species by their fruiting bodies. ▪ Monitor fruiting body development to determine optimum collection time. ▪ Store fruiting bodies under conditions that maintain spore viability. Range: temperature, moisture. ▪ Prepare spore suspensions to allow their application through a spray boom. ▪ Ensure beds are kept moist after application to maintain spore viability.
Element 3 Innoculate seed bed areas using needle litter.	Yes/No	Range: radiata pine or Douglas fir. <ul style="list-style-type: none"> ▪ Identify the layer containing fungus mycelium in the forest or stand. Range: coarse litter layer, humifying layer, top soil layer. ▪ Utilise pulverising and application techniques to ensure an even spread. ▪ Ensure soil is kept moist after treatment to maintain spore vitality.

_____ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 10949 (version 3)

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

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