



# Truffles and Mushrooms

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## Lists of arbuscular mycorrhizal plants suitable for windbreaks around truffières and unsuitable ectomycorrhizal plants

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There are several web sites that have lists of the types of mycorrhizas that are formed by various species of plants. Some good ones are:

<http://www.ffp.csiro.au/research/mycorrhiza/ozplants.html#define>

[http://www.horticulturalalliance.com/Plant\\_Species\\_and\\_Type\\_of\\_Mycorrhizae.asp](http://www.horticulturalalliance.com/Plant_Species_and_Type_of_Mycorrhizae.asp)

<http://www.mycorrhiza.org/EXPERTflat.PDF>

<http://www.nifg.org.uk/ecto.htm#Which%20trees>

[http://www.tandjenterprises.com/BioVam\\_Plant\\_List.htm](http://www.tandjenterprises.com/BioVam_Plant_List.htm)

Table 1 is a short list of a few plants that form arbuscular mycorrhizas (AM or VAM) that can be grown near to a truffière. Incidentally with the exception of native beeches, manuka and kanaka almost all New Zealand natives form AM mycorrhizas.

Table 2 is a list of some of the trees that form ectomycorrhizas. These harbour fungi that can compete with truffle fungi. Truffières should not be planted close to these and these trees should not be included in living windbreaks adjacent to a truffière.

Table 1. Suitable companion / windbreak trees (these form arbuscular mycorrhizas)

Common name	Botanical name	Plant family
Akeake	<i>Dodonaea viscosa</i>	Sapindaceae,
Akiraho	<i>Olearia paniculata</i>	Asteraceae
Almond	<i>Prunus dulcis</i>	Rosaceae
Apple	<i>Malus</i>	Rosaceae
Apricot	<i>Prunus armeniaca</i>	Rosaceae
Angelica tree	<i>Aralia</i>	Araliaceae
Ash	<i>Fraxinus</i>	Oleaceae
Avocado	<i>Persea americana</i>	Lauraceae
Bamboo	<i>Bambusa</i>	Pooideae
Banana	<i>Musa</i>	Musaceae
Barberry	<i>Berberis</i>	Berberidaceae
Bayberry	<i>Myrica</i>	Myricaceae
Black locust	<i>Robinia</i>	Fabaceae
Blackberry	<i>Rubus eubatus</i>	Rosaceae
Box elder	<i>Acer negundo</i>	Aceraceae

Broadleaf	<i>Griselinia</i>	Griselinaceae
Boxwood	<i>Buxus</i>	Buxaceae
Buckeye	<i>Aesculus</i>	Hippocastanaceae
Burning bush	<i>Euonymus</i>	Celastraceae
Cacao	<i>Theobroma cacao</i>	Sterculiaceae
Camellia	<i>Camellia</i>	Theaceae
Catalpa	<i>Catalpa</i>	Bignoniaceae
Cherry	<i>Prunus avium</i>	Rosaceae
Chinaberry	<i>Melia azedarach</i>	Meliaceae
Coral tree	<i>Erythrina indica</i>	Fabaceae
Crabapple	<i>Malus</i>	Rosaceae
Cryptomeria	<i>Cryptomeria japonica</i>	Taxodiaceae
Cucumber tree	<i>Magnolia acuminata</i>	Magnoliaceae
Dogwood	<i>Cornus</i>	Cornaceae
Fig	<i>Ficus carica</i>	Moraceae
Flax, New Zealand	<i>Phormium tenax</i>	Agavaceae
Fuschia	<i>Fuchsia</i>	Onagraceae
Ginkgo	<i>Ginkgo biloba</i>	Ginkgoaceae
Gorse	<i>Ulex europaeus</i>	Fabaceae
Grapes	<i>Vitis</i>	Vitaceae
Hackberry	<i>Celtis</i>	Ulmaceae
Hibiscus	<i>Hibiscus rosa-sinensis</i>	Malvaceae
Holly	<i>Ilex</i>	Aquifoliaceae
Horse chestnut	<i>Aesculus</i>	Hippocastanaceae
Juniper	<i>Juniperus</i>	Cupressaceae
Kamaha	<i>Weinmannia racemosa</i>	Cunoniaceae
Karamu	<i>Coprosma robusta</i>	Rubiaceae
Kauri	<i>Agathis</i>	Araucariaceae
Korokia	<i>Corokia buddleoides</i>	Cornaceae
Kowhai	<i>Sophora spp.</i>	Papilionaceae
Lacebark	<i>Hoheria populnea</i>	Malvaceae
Lawson cypress	<i>Chamaecyparis lawsoniana</i>	Cupressaceae
Lemonwood	<i>Pittosporum</i>	Pittosporaceae
Leyland cypress	<i>X Cupressocyparis leylandii</i>	Cupressaceae
Macrocarpa	<i>Cupressus macrocarpa</i>	Cupressaceae
Magnolia	<i>Magnolia</i>	Magnoliaceae
Mahoe	<i>Melicactus ramiflorus</i>	Violaceae
Maples	<i>Acer</i>	Aceraceae
Marbleleaf	<i>Carpodetus serratus</i>	Carpodetaceae
Mulberry	<i>Morus</i>	Moraceae
Olive	<i>Olea europaea</i>	Oleaceae
Palms	<i>Cycad</i>	Cycadaceae
Papaya	<i>Carica papaya</i>	Cariceae
Paulownia	<i>Paulownia</i>	Paulowniaceae
Peach	<i>Prunus persica</i>	Rosaceae
Pear	<i>Pyrus communis</i>	Rosaceae
Persimmon	<i>Diospyros</i>	Ebenaceae
Plum	<i>Prunus</i>	Rosaceae
Podocarp	<i>Podocarpus</i>	Podocarpaceae
Pohutukawa	<i>Metrosideros excelsior</i>	Myrtaceae
Privet	<i>Ligustrum</i>	Oleaceae

Rain tree	<i>Koelreuteria elegans</i>	Sapindaceae
Rata	<i>Metrosideros</i>	Myrtaceae
Redwood, coastal	<i>Sequoia sempervirens</i>	Taxodiaceae
Redwood, giant	<i>Sequoiadendron giganteum</i>	Taxodiaceae
Ribbonwood	<i>Plagianthus betulinus</i>	Malvaceae
Rowan	<i>Sorbus</i>	Rosaceae
Sycamore	<i>Acer</i>	Aceraceae
Tree-of-heaven	<i>Ailanthus altissima</i>	Simaroubaceae
Tulip tree	<i>Liriodendron</i>	Magnoliaceae
Viburnum	<i>Viburnum</i>	Caprifoliaceae
Yew	<i>Taxus spp</i>	Taxaceae

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Table 2. Ectomycorrhizal plants (\* may also be found with arbuscular mycorrhizas).

Common name	Botanical name	Plant family
Alder	<i>Alnus</i>	Betulaceae
Strawberry tree	<i>Arbutus</i>	Ericaceae
Aspen	<i>Populus</i> *	Salicaceae
Beech	<i>Fagus</i>	Fagaceae
Birch	<i>Betula</i>	Betulaceae
Cedars	<i>Cedrus</i>	Pinaceae
Chestnut	<i>Castanea</i>	Fagaceae
Cherry, bird	<i>Prunus padus</i>	Rosaceae
Cherry, dwarf	<i>Prunus cerasus</i>	Rosaceae
Cherry, wild	<i>Prunus avium</i>	Rosaceae
Douglas fir	<i>Pseudotsuga menziesii</i>	Pinaceae
Eucalyptus	<i>Eucalyptus</i> *	Myrtaceae
Fir	<i>Abies</i>	Pinaceae
Hawthorn	<i>Crataegus</i>	Rosaceae
Hazels	<i>Corylus</i>	Betulaceae
Hemlocks	<i>Tsuga</i>	Pinaceae
Hickory	<i>Carya</i>	Juglandaceae
Hornbeam	<i>Carpinus</i>	Betulaceae
Ironwood	<i>Casuarina</i>	Casuarinaceae
Kanuka	<i>Kunzea ericoides</i> *	Myrtaceae
Larch	<i>Larix</i>	Pinaceae
Lime	<i>Tilia</i>	Tiliaceae
Manuka	<i>Leptospermum scoparium</i> *	Myrtaceae
Oak	<i>Quercus</i>	Fagaceae
Pine	<i>Pinus</i>	Pinaceae
Poplar	<i>Populus</i> *	Salicaceae
Redbud	<i>Cercis canadensis</i>	Fagaceae
Rock rose	<i>Helianthemum</i>	Cistaceae
She-oak	<i>Casuarina</i> *	Casuarinaceae
Spruce	<i>Picea</i>	Pinaceae
Walnut	<i>Juglans</i>	Juglandaceae
White leaved rock rose	<i>Cistus</i>	Cistaceae
Wild service tree	<i>Sorbus torminalis</i>	Rosaceae
Wild pear	<i>Pyrus pyraister</i>	Rosaceae
Willows	<i>Salix</i> *	Salicaceae