
Review

A revision of the descriptions of ectomycorrhizas published since 1961

Miriam DE ROMAN^{1,3}, Vanessa CLAVERIA² and Ana Maria DE MIGUEL²

¹*CABI Bioscience, Bakeham Lane, Egham, Surrey TW20 9TY, UK.*

²*Department of Botany, University of Navarra, ES-31080 Pamplona, Spain.*

³*Department of Agriculture & Forestry, School of Biological Sciences, University of Aberdeen, Hilton Campus, Block M, Aberdeen AB24 4FA, UK.*

E-mail: miriamderoman@hotmail.com

Received 5 March 2005; accepted 17 June 2005.

All available publications providing descriptions of ectomycorrhizas (ECM) were reviewed in order to build a database containing details on fungus forming the ECM, host tree, country where the material for description was collected, and habitat of the ECM. Other secondary data were also recorded. In all 1244 descriptions of ECM published since 1961 in 479 papers were reviewed. The number of different ECM morphotypes described was 814. Most ECM described were collected in Europe and North America. Gymnosperms were the most common tree associates, and boreal and temperate forests the most studied ecosystems. Fungal symbionts were mostly *Basidiomycota*, epigeous, and with mushroom-like morphology. The paper also addresses the gaps in ECM knowledge that mycorrhizologists should address in future studies.

INTRODUCTION

Research on ectomycorrhizas (ECM) has evolved greatly over the last 40 years. From the first morphological analyses to the latest ecological, physiological and genetic studies, the range of information now available is outstanding. Despite all the scientific advances, the identification of the fungi involved remains one of the first steps to be followed when studying ECM communities. Molecular techniques are efficient tools to achieve this aim, but the morphological and anatomical features of the ECM are still an invaluable source of information for the better understanding of the fungal component.

Many ECM morphotypes have been more or less accurately described since the beginning of ectomycorrhizal symbiosis research in the late 19th century. A few authors have tried to establish classification systems in order to develop identification keys paralleling those available for plants and animals, but this is a difficult task. Dominik (1969) made a first attempt. A few years later Zak (1973) stated that a detailed description of each ECM was essential for its identification, and that this description should be based on several collections in order to note possible variations in the ECM over different developmental stages.

In spite of these general ideas, the methodology used by each author when describing an ECM varied greatly in descriptions published before 1986, when Agerer (1986a, 1987–2002, 1994a, 1999a) began to publish guidelines for the systematic of description and identification of ECM widely used nowadays. In addition, Agerer created a binomial nomenclature system for those ECM described but not yet identified, edited a *Colour Atlas of Ectomycorrhizas* (Agerer 1987–2002) with photographs of the ECM described to facilitate identification by comparison, and developed computer software to characterize and determine ECM (Agerer & Rambold 1998).

Other approaches for the description and identification of ECM also exist. Ingleby *et al.* (1990) developed a system to name the features of ECM, and published 24 brief descriptions of ECM including photographs and drawings.

Another widely used methodology is the so-called *Concise Descriptions of North American Ectomycorrhizas*, developed by Goodman *et al.* (1996–2000). The descriptions published according to this system are more detailed than those in Ingleby *et al.* (1990), but they lack the level of detail of the system proposed by Agerer (1986a, 1987–2002, 1994a, 1999a), and are confined to the North American geographical region.

Table 1. Compilation of the 1244 ECM descriptions reviewed. ECM descriptions are ordered alphabetically by name of ECM and then by reference, with details of the host tree, the country where the material was collected, and the habitat where the ECM was found (1, field; 2, synthesized *in vitro*; 3, nursery; 4, truffle ground stand; 5, various).

Ectomycorrhiza	Reference	Host tree	Country	Habitat
<i>Abierhiza fascicularis</i>	Haug <i>et al.</i> (1994)	<i>Abies kawakamii</i>	Taiwan	1
<i>A. tomentosa</i>	Haug <i>et al.</i> (1994)	<i>A. kawakamii</i>	Taiwan	1
AD (angle droit, Giraud 1988)	Águeda, Fernández & De Miguel (2001)	<i>Quercus ilex</i>	Spain	4
	Bencivenga <i>et al.</i> (1995)	Not specified	Italy	3
	De Román & De Miguel (2005)	<i>Q. ilex</i>	Spain	1
	Di Massimo <i>et al.</i> (1996)	<i>Q. ilex</i>	Spain	3
	Etayo & De Miguel (1998)	<i>Q. faginea, Q. ilex</i>	Spain	4
	Giraud (1988)	Not specified	France	4
	Granetti & Baciarelli (1997)	<i>Q. ilex</i>	Italy	4
	Sáez & De Miguel (1995)	Not specified	Spain	4
<i>Agaricales</i>	Buée, Vairelles & Garbaye (2004)	<i>Fagus sylvatica</i>	France	1
	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
<i>Albatrellus ovinus</i>	Agerer (1996b)	<i>Picea abies</i>	Germany	1
	Agerer (1996g)	<i>P. abies</i>	Germany	1
	Agerer <i>et al.</i> (1996a)	<i>P. abies</i>	Germany	1
<i>Alnirhiza atroverrucosa</i>	Pritsch, Munch & Buscot (1997)	<i>Alnus glutinosa</i>	Germany	1
<i>A. cremicolor</i>	Pritsch <i>et al.</i> (1997)	<i>A. glutinosa</i>	Germany	1
<i>A. cystidiobrunnea</i>	Pritsch <i>et al.</i> (1997)	<i>A. glutinosa</i>	Germany	1
<i>A. texta</i>	Pritsch <i>et al.</i> (1997)	<i>A. glutinosa</i>	Germany	1
<i>Alpova diplophloeus</i>	Godbout & Fortin (1983)	<i>A. crispa, A. rugosa</i>	Canada	2
	Miller, Koo & Molina (1990)	<i>A. rubra</i>	USA	5
	Wiedmer, Senn-Irlet & Agerer (2001)	<i>A. viridis</i>	Switzerland	1
<i>Amanita</i>	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
<i>A. caesarea</i>	Meotto <i>et al.</i> (1997)	<i>Quercus</i>	Italy	1
<i>A. citrina</i>	Mleczko (2002a)	<i>Pinus sylvestris</i>	Poland	1
	Mleczko (2004a)	<i>P. sylvestris</i>	Poland	1
<i>A. muscaria</i>	Chu-Chou & Grace (1983)	<i>Pseudotsuga menziesii</i>	N. Zealand	1
	Ingleby <i>et al.</i> (1990)	<i>Betula pendula</i>	UK	1
<i>A. spissa</i>	Torres & Honrubia (1994)	<i>Pinus halepensis</i>	Spain	2
<i>Amphinema</i>	Hagerman <i>et al.</i> (1999)	Not specified	Canada	1
	Hagerman, Sakakibara & Durall (2001)	<i>Pseudotsuga menziesii</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>Betula papyrifera, P. menziesii</i>	Canada	5
<i>A. byssoides</i>	Danielson & Pruden (1989)	<i>Picea pungens</i>	Canada	1
	Danielson, Zak & Parkinson (1984)	<i>Pinus banksiana</i>	Canada	3
	Fassi & De Vecchi (1962)	<i>P. strobus</i>	Italy	3
	Haug <i>et al.</i> (1994)	<i>P. taiwanensis</i>	Taiwan	1
	Ingleby <i>et al.</i> (1990)	<i>Picea sitchensis</i>	UK	1
	Kernaghan (2001)	<i>Abies lasiocarpa, Dryas octopetala, Picea engelmannii, Salix barrattiana</i>	Canada	1
	Massicotte <i>et al.</i> (1999b)	<i>A. grandis, Arbutus menziesii, Lithocarpus densiflora, Pinus ponderosa, Pseudotsuga menziesii</i>	USA	3
	Montecchio <i>et al.</i> (2002)	<i>Quercus ilex</i>	Italy	1
	Weiss (1989)	<i>Picea abies</i>	Germany	1
	Weiss (1991a)	<i>P. abies</i>	Germany	2

<i>A. byssoides</i> -like	Harniman & Durall (1996a)	<i>P. engelmannii</i>	Canada	1
<i>Arcangiella asterosperma</i>	Luppi & Gautero (1967)	<i>Quercus pubescens</i>	Italy	1
<i>A. borziana</i>	Egli <i>et al.</i> (2001)	<i>Picea abies</i>	Switzerland	1
<i>Ascomycota</i>	Al Sayegh & Kraigher (2000)	<i>Fagus</i>	Slovenia	1
	Haug <i>et al.</i> (2005)	<i>Neea</i>	Ecuador	1
	Ingleby <i>et al.</i> (1990)	<i>Betula pendula</i>	UK	1
	Ingleby <i>et al.</i> (1990)	<i>Picea sitchensis</i>	UK	1
	Kernaghan (2001)	<i>Dryas octopetala</i>	Canada	1
	Kernaghan (2001)	<i>Salix barrattiana</i>	Canada	1
<i>Astraeus hygrometricus</i>	Danielson (1984b)	<i>Pinus banksiana</i>	Canada	2
	Giraud (1988)	Not specified	France	4
	Schramm (1966)	<i>Pinus virginiana</i>	USA	1
<i>Austropaxillus boletinoides</i>	Palfner (2001)	<i>Nothofagus betuloides</i>	Chile	1
	Palfner (2001)	<i>N. pumilio</i>	Chile	1
	Palfner (2002a)	<i>N. pumilio</i>	Chile	1
<i>Balsamia alba</i>	Palfner & Agerer (1998a)	<i>Pinus jeffreyi</i>	USA	1
	Palfner (1998a)	<i>P. jeffreyi</i>	USA	1
<i>Bankera fuligineo-alba</i>	Agerer & Otto (1997)	<i>P. sylvestris</i>	Germany	1
	Agerer & Otto (1998)	<i>P. sylvestris</i>	Germany	1
	Danielson (1984b)	<i>P. banksiana</i>	Canada	2
<i>Basidiomycota</i>	Jones <i>et al.</i> (1997)	<i>Betula papyrifera, Pseudotsuga menziesii</i>	Canada	5
	Jones <i>et al.</i> (1997)	<i>B. papyrifera, P. menziesii</i>	Canada	5
	Jones <i>et al.</i> (1997)	<i>B. papyrifera, P. menziesii</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>B. papyrifera, P. menziesii</i>	Canada	5
	Jones <i>et al.</i> (1997)	<i>B. papyrifera, P. menziesii</i>	Canada	5
	Jones <i>et al.</i> (1997)	<i>B. papyrifera, P. menziesii</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>B. papyrifera, P. menziesii</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>B. papyrifera, P. menziesii</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>B. papyrifera, P. menziesii</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>Pseudotsuga menziesii</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>Pseudotsuga menziesii</i>	Canada	1
	Massicotte <i>et al.</i> (1999b)	<i>Abies grandis, Lithocarpus densiflora, Pinus ponderosa, Pseudotsuga menziesii</i>	USA	3
	Massicotte <i>et al.</i> (1999b)	<i>Abies grandis, P. menziesii</i>	USA	3
	Massicotte <i>et al.</i> (1999b)	<i>Arbutus menziesii, P. menziesii</i>	USA	3
	Massicotte <i>et al.</i> (1999b)	<i>Pinus ponderosa</i>	USA	3
<i>Betulaerhiza hystrix</i>	Müller & Agerer (1990)	<i>Betula pendula</i>	Germany	1
	Müller (1994)	<i>B. pendula</i>	Germany	1
<i>Boletaceae</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
	See, Alexander & Watling (1997)	<i>Shorea leprosula</i>	Malaysia	1
	Selosse, Bauer & Moyersoen (2002)	<i>Carpinus</i>	France	1
<i>Boletinus cavipes</i>	Treu (1990a)	<i>Larix decidua</i>	Germany	1
	Treu (1990b)	<i>L. decidua</i>	Germany	1
<i>Boletopsis leucomelaena</i>	Agerer (1992a)	<i>Picea abies</i>	Germany	1
	Agerer (1993a)	<i>P. abies</i>	Germany	1
<i>Boletus</i>	Chu-Chou & Grace (1983)	<i>Pseudotsuga menziesii</i>	N. Zealand	1
	Schramm (1966)	<i>Pinus virginiana</i>	USA	1
<i>B. aereus</i>	Ceruti <i>et al.</i> (1985)	<i>Castanea sativa</i>	Italy	2

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
<i>Boletus badius</i>	Voiry (1981)	<i>Quercus</i>	France	1
<i>B. edulis</i>	Agerer & Gronbach (1990a)	<i>Picea abies</i>	Germany	1
	Ceruti <i>et al.</i> (1987)	<i>P. excelsa</i>	Italy	2
	Ceruti <i>et al.</i> (1987)	<i>Pinus sylvestris</i>	Italy	2
	Gronbach (1988)	<i>Picea abies</i>	Germany	1
	Luppi & Gautero (1967)	<i>Quercus robur</i>	Italy	1
	Meotto & Pellegrino (1989)	<i>Castanea crenata</i> , <i>C. sativa</i> , <i>Quercus cerris</i> , <i>Quercus rubra</i>	Italy	3
	<i>B. luridus</i>	Brunner <i>et al.</i> (1992)	<i>Picea abies</i>	Switzerland
<i>B. loyo</i>	Palfner (2001)	<i>Nothofagus oblicua</i>	Chile	1
<i>B. pinophilus</i>	Duñabeitia <i>et al.</i> (1996)	<i>Pinus radiata</i>	Spain	3
<i>B. putidus</i>	Palfner (2001)	<i>Nothofagus oblicua</i>	Chile	1
<i>B. rhodoxanthus</i>	Hahn (2001)	<i>Cistus ladanifer</i>	Germany	1
<i>Byssocorticium atrovirens</i>	Brand (1991f)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Luppi & Gautero (1967)	<i>Quercus petraea</i>	Italy	1
	Massicotte <i>et al.</i> (1999b)	<i>Abies grandis</i> , <i>Arbutus menziesii</i> , <i>Lithocarpus densiflora</i> , <i>Pinus ponderosa</i> , <i>Pseudotsuga menziesii</i>	USA	3
<i>Cantharellus cibarius</i>	Zak & Larsen (1978)	<i>P. menziesii</i>	USA	1
	Mleczko (2002b)	<i>Pinus sylvestris</i>	Poland	1
	Mleczko (2004b)	<i>P. sylvestris</i>	Poland	1
<i>C. formosus</i>	Countess & Goodman (2000)	<i>Tsuga heterophylla</i>	Canada	1
<i>Castanopsis rhiza glabra</i>	Haug <i>et al.</i> (1994)	<i>Castanopsis borneensis</i>	Taiwan	1
<i>Cenococcum geophilum</i>	Abourouh & Najim (1995)	<i>Cedrus atlantica</i>	Morocco	1
	Agerer & Gronbach (1988)	<i>Picea abies</i>	Germany	1
	Águeda <i>et al.</i> (2001)	<i>Quercus ilex</i>	Spain	4
	Al Sayegh & Kraigher (1999)	<i>Picea abies</i>	Slovenia	1
	Azul & Freitas (1999)	<i>Quercus suber</i>	Portugal	1
	Baxter <i>et al.</i> (1999)	<i>Quercus</i>	USA	1
	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1
	Bradbury, Danielson & Visser (1998)	<i>P. contorta</i>	Canada	1
	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Danielson & Pruden (1989)	<i>Picea pungens</i>	Canada	1
	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
	Di Battista <i>et al.</i> (2002)	<i>Pseudotsuga menziesii</i>	USA	3
	Di Massimo <i>et al.</i> (1996)	<i>Pinus nigra</i>	Spain	3
	Dickie <i>et al.</i> (2004)	<i>Helianthemum bicknellii</i>	USA	1
	Donnini & Bencivenga (1995)	<i>Corylus avellana</i> , <i>Quercus pubescens</i>	Italy	4
	Fontana & Centrella (1967)	<i>Quercus petraea</i>	Italy	1
	Giraud (1988)	Not specified	France	4
	Godbout & Fortin (1983)	<i>Alnus crispa</i> , <i>A. rugosa</i>	Canada	2
	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3

	Gronbach (1988)	<i>Picea abies</i>	Germany	1
	Hagerman <i>et al.</i> (1999)	Not specified	Canada	1
	Hagerman <i>et al.</i> (2001)	<i>Pseudotsuga menziesii</i>	Canada	1
	Harniman & Durall (1996b)	<i>Picea engelmannii</i>	Canada	1
	Ingleby <i>et al.</i> (1990)	<i>P. sitchensis</i>	UK	1
	Jany, Garbaye & Martin (2002)	<i>Fagus sylvatica</i>	France	1
	Jones <i>et al.</i> (1997)	<i>Betula papyrifera</i> , <i>Pseudotsuga menziesii</i>	Canada	5
	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
	Kernaghan (2001)	<i>Abies lasiocarpa</i> , <i>Dryas octopetala</i> , <i>Picea engelmannii</i> , <i>Salix barrattiana</i>	Canada	1
	Massicotte <i>et al.</i> (1999b)	<i>Abies grandis</i> , <i>Arbutus menziesii</i> , <i>Lithocarpus densiflora</i> , <i>Pinus ponderosa</i> , <i>Pseudotsuga menziesii</i>	USA	3
	Moser <i>et al.</i> (2005)	<i>Quercus garryana</i>	USA	1
	Palfner (2001)	<i>Nothofagus pumilio</i>	Chile	1
	Pigott (1982)	<i>Tilia cordata</i>	UK	3
	Rose, Gerald Van Dyke & Davey (1981)	<i>Eucalyptus nova-anglica</i>	USA	1
	Schramm (1966)	<i>Populus tremuloides</i>	USA	1
	See <i>et al.</i> (1997)	<i>Shorea leprosula</i>	Malaysia	1
	Torres & Honrubia (1997)	<i>Pinus halepensis</i>	Spain	3
	Voiry (1981)	<i>Fagus</i>	France	1
	Wöllecke (2001)	<i>Pinus sylvestris</i>	Germany	1
<i>Chamonixia caespitosa</i>	Raidl (1999)	<i>Picea abies</i>	Germany	1
<i>Chroogomphus</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
<i>C. helveticus</i>	Agerer (1990a)	<i>Picea abies</i>	Germany	1
	Agerer (1990b)	<i>P. abies</i>	Germany	1
<i>C. rutilus</i>	Agerer (1990a)	<i>Pinus sylvestris</i>	Germany	1
<i>Clavulicium delectabile</i>	Tedersoo <i>et al.</i> (2003)	<i>Betula pendula</i>	Estonia	1
	Tedersoo <i>et al.</i> (2003)	<i>Picea abies</i>	Estonia	1
<i>Clavulina cfr coralloides</i>	Tedersoo <i>et al.</i> (2003)	<i>Betula pendula</i>	Estonia	1
<i>C. cristata</i>	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
<i>Coltricia perennis</i>	Danielson (1984b)	<i>Pinus banksiana</i>	Canada	2
Cortinarioid	Selosse <i>et al.</i> (2002)	Not specified	France	1
<i>Cortinarius</i>	Águeda <i>et al.</i> (2001)	<i>Quercus ilex</i>	Spain	4
	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1
	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Dickie <i>et al.</i> (2004)	<i>Helianthemum bicknellii</i>	USA	1
	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
	Jakucs (2002a)	<i>P. alba</i>	Hungary	1
	Kernaghan (2001)	<i>Picea engelmannii</i>	Canada	1
	Kernaghan (2001)	<i>Salix barrattiana</i>	Canada	1
	Treu (1990a)	<i>Larix decidua</i>	Germany	1
<i>C. alboviolaceus</i>	Voiry (1981)	<i>Quercus</i>	France	1
<i>C. alneus</i>	Pritsch <i>et al.</i> (1997)	<i>Alnus glutinosa</i>	Germany	1
<i>C. alnobetulae</i>	Wiedmer & Senn-Irlet (1999a)	<i>A. viridis</i>	Switzerland	1

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
<i>Cortinarius amoenolens</i>	Hagerman <i>et al.</i> (1999)	Not specified	Canada	1
<i>C. armillatus</i>	Cuvelier & Agerer (1991)	<i>Betula pendula</i>	Belgium	1
<i>C. atropusillus</i>	Wiedmer & Senn-Irlet (1999b)	<i>Alnus viridis</i>	Switzerland	1
<i>C. austrosalor</i>	Palfner (2001)	<i>Nothofagus nitida</i>	Chile	1
	Palfner (2002b)	<i>N. nitida</i>	Chile	1
<i>C. badiovestitus</i>	Wiedmer & Senn-Irlet (1999c)	<i>Alnus viridis</i>	Switzerland	1
<i>C. bibulus</i>	Miller <i>et al.</i> (1990)	<i>A. rubra</i>	USA	5
	Wiedmer & Senn-Irlet (2001a)	<i>A. viridis</i>	Switzerland	1
<i>C. bolaris</i>	Brand (1991)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1992c)	<i>F. sylvatica</i>	Germany	1
<i>C. calochrous</i>	Kernaghan (2001)	<i>Picea engelmannii</i>	Canada	1
<i>C. cinnabarinus</i>	Brand (1991)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1992d)	<i>F. sylvatica</i>	Germany	1
	Ceruti, Benvenuti & Luppi Mosca (1988)	<i>F. sylvatica</i>	Italy	1
<i>C. helodes</i>	Becerra <i>et al.</i> (2005)	<i>Alnus acuminata</i>	Argentina	1
<i>C. helvelloides</i>	Pritsch <i>et al.</i> (1997)	<i>A. glutinosa</i>	Germany	1
	Wiedmer & Senn-Irlet (2001b)	<i>A. viridis</i>	Switzerland	1
<i>C. hercynicus</i>	Agerer (1988b)	<i>Picea abies</i>	Germany	1
	Agerer (1990c)	<i>P. abies</i>	Germany	1
<i>C. himmuleus</i>	Kovacs <i>et al.</i> (2002)	<i>Betula celtiberica</i>	Spain	1
<i>C. huronensis</i>	Kuss, Raidl & Beenken (2004)	<i>Pinus rotundata</i>	Germany	1
<i>C. ionochlorus</i>	Montecchio <i>et al.</i> (2001a)	<i>Quercus ilex</i>	Italy	1
<i>C. kühneri</i>	Wiedmer & Senn-Irlet (1999d)	<i>Alnus viridis</i>	Switzerland	1
<i>C. laniger</i>	Hagerman <i>et al.</i> (2001)	<i>Pseudotsuga menziesii</i>	Canada	1
<i>C. magellanicus</i>	Palfner (2001)	<i>Nothofagus dombeyi</i>	Chile	1
	Palfner (2002c)	<i>N. dombeyi</i>	Chile	1
<i>C. multiformis</i>	Ceruti <i>et al.</i> (1988)	<i>Fagus sylvatica</i>	Italy	1
<i>C. multiformis</i>	Luppi & Gautero (1967)	<i>Quercus petraea</i>	Italy	1
<i>C. nemorensis</i>	Ceruti <i>et al.</i> (1988)	<i>Fagus sylvatica</i>	Italy	1
<i>C. obtusus</i>	Agerer (1987c)	<i>Picea abies</i>	Germany	1
	Gronbach & Agerer (1988)	<i>P. abies</i>	Germany	1
	Gronbach (1988)	<i>P. abies</i>	Germany	1
<i>C. pluvius</i>	Wiedmer & Senn-Irlet (1998)	<i>Alnus viridis</i>	Switzerland	1
<i>C. subporphyropus</i>	Godbout & Fortin (1983)	<i>A. crispa</i> , <i>A. rugosa</i>	Canada	2
<i>C. varicolor</i>	Agerer (1988b)	<i>Picea abies</i>	Germany	1
	Agerer (1989)	<i>P. abies</i>	Germany	1
<i>C. venetus</i>	Agerer (1987c)	<i>P. abies</i>	Germany	1
	Agerer (1988a)	<i>P. abies</i>	Germany	1
<i>Craterellus tubaeformis</i>	Fransson (2004a)	<i>Quercus robur</i>	Sweden	1
	Mleczko (2002c)	<i>Pinus sylvestris</i>	Poland	1
	Mleczko (2004c)	<i>P. sylvestris</i>	Poland	1
	Trappe, Eberhart & Luoma (2000)	<i>Tsuga heterophylla</i>	USA	1
<i>Cyclobalanopsis rhiza argenteogramulosa</i>	Haug <i>et al.</i> (1994)	<i>Cyclobalanopsis glauca</i>	Taiwan	1
<i>Dermocybe</i>	Bradbury <i>et al.</i> (1998)	<i>Pinus contorta</i>	Canada	1

<i>D. cinnamomea</i>	Agerer & Gronbach (1987)	<i>Picea abies</i>	Germany	1
	Agerer (1987a)	<i>P. abies</i>	Germany	1
	Gronbach (1988)	<i>P. abies</i>	Germany	1
<i>D. crocea</i>	Uhl & Agerer (1987)	<i>Pinus sylvestris</i>	Germany	1
	Uhl & Agerer (1988)	<i>P. sylvestris</i>	Germany	1
<i>D. palustris</i>	Uhl & Agerer (1987)	<i>P. mugo</i>	Germany	1
<i>D. sanguinea</i>	Agerer (1987a)	<i>Picea abies</i>	Germany	1
	Agerer (1987d)	<i>P. abies</i>	Germany	1
<i>D. semisanguinea</i>	Agerer & Uhl (1989)	<i>Pinus sylvestris</i>	Germany	1
<i>Descolea antarctica</i>	Palfner (1997)	<i>Nothofagus alpina</i>	Chile	1
	Palfner (1998b)	<i>N. alpina</i>	Chile	1
	Palfner (2001)	<i>N. alpina</i>	Chile	1
<i>Descomyces albus</i>	Agerer, Beenken & Bougher (2001)	<i>Eucalyptus</i>	Australia	1
<i>Elaphomyces aculeatus</i>	Agerer (1999c)	<i>Quercus robur</i>	Germany	1
	Agerer (2002a)	<i>Q. robur</i>	Germany	1
<i>E. muricatus</i>	Brand (1991g)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
	Fontana & Centrella (1967)	<i>Castanea sativa, F. sylvatica</i>	Italy	1
<i>Entoloma sinuatum</i>	Agerer (1997)	<i>Salix</i>	Germany	1
	Agerer (1998a)	<i>Salix</i>	Germany	1
<i>Fagirhiza arachnoidea</i>	Brand (1991l)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1992e)	<i>F. sylvatica</i>	Germany	1
<i>F. cystidiophora</i>	Brand (1988a)	<i>F. sylvatica</i>	Germany	1
<i>F. fusca</i>	Brand (1991d)	<i>F. sylvatica</i>	Germany	1
	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
<i>F. globulifera</i>	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
	Brand (1992a)	<i>F. sylvatica</i>	Germany	1
<i>F. granulosa</i>	Brand (1988b)	<i>F. sylvatica</i>	Germany	1
<i>F. lanata</i>	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
<i>F. oleifera</i>	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
<i>F. pallida</i>	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
<i>F. rosea</i>	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
<i>F. setifera</i>	Brand (1991b)	<i>F. sylvatica</i>	Germany	1
	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
<i>F. spinulosa</i>	Brand (1991a)	<i>F. sylvatica</i>	Germany	1
	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
<i>F. tubulosa</i>	Brand (1988c)	<i>F. sylvatica</i>	Germany	1
<i>F. vermiculiformis</i>	Jakucs & Agerer (1998)	<i>F. sylvatica</i>	Hungary	1
	Jakucs (1998)	<i>F. sylvatica</i>	Hungary	1
<i>Gautieria inapire</i>	Palfner (2001)	<i>Nothofagus pumilio</i>	Chile	1
	Palfner (2002d)	<i>N. pumilio</i>	Chile	1
<i>G. othii</i>	Duñabeitia <i>et al.</i> (1996)	<i>Pinus radiata</i>	Spain	3
<i>Gastrum fimbriatum</i>	Agerer & Beenken (1998a)	<i>Fagus sylvatica</i>	Germany	1
	Agerer (1998b)	<i>F. sylvatica</i>	Germany	1
<i>Genea</i>	Jakucs (2002a)	<i>Populus alba</i>	Hungary	1
<i>G. hispidula</i>	Brand (1991e)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
<i>G. klotzschii</i>	Fontana & Centrella (1967)	<i>Carpinus betulus, Quercus petraea</i>	Italy	1

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
<i>Genea verrucosa</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
	Jakucs & Bratek (1998a)	<i>Quercus</i>	Hungary	1
	Jakucs, Bratek & Agerer (1998a)	<i>Quercus</i>	Hungary	1
<i>Gomphidius glutinosus</i>	Agerer (1991a)	<i>Picea abies</i>	Germany	1
	Agerer (1991b)	<i>P. abies</i>	Germany	1
<i>G. roseus</i>	Agerer (1991a)	<i>P. abies</i>	Germany	1
	Agerer (1992b)	<i>Pinus sylvestris</i>	Germany	1
<i>Gomphus clavatus</i>	Agerer (2002b)	<i>Picea abies</i>	Germany	1
	Agerer, Beenken & Christan (1998a)	<i>P. abies</i>	Germany	1
<i>Gyrodon lividus</i>	Agerer & Treu (1993)	<i>Alnus incana</i>	Germany	1
<i>G. monticola</i>	Becerra <i>et al.</i> (2005)	<i>A. acuminata</i>	Argentina	1
<i>Gyroporus cyanescens</i>	Agerer (1999d)	<i>Pinus sylvestris</i>	Germany	1
	Agerer (2002c)	<i>P. sylvestris</i>	Germany	1
<i>Hebeloma</i>	Águeda <i>et al.</i> (2001)	<i>Quercus ilex</i>	Spain	4
	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1
	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Danielson & Pruden (1989)	<i>Picea pungens</i>	Canada	1
	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
	Hagerman <i>et al.</i> (1999)	Not specified	Canada	1
	Jakucs (2002a)	<i>Populus alba</i>	Hungary	1
	Jones <i>et al.</i> (1997)	<i>Betula papyrifera</i> , <i>Pseudotsuga menziesii</i>	Canada	5
	Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	5
	Kernaghan (2001)	<i>Picea engelmannii</i>	Canada	1
	Ursic & Peterson (1997)	<i>Pinus strobus</i>	Canada	3
<i>H. alpinum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. ammophilum</i>	Jakucs (2002b)	<i>Fumana procumbens</i>	Hungary	1
	Jakucs, Magyar & Beenken (1999)	<i>F. procumbens</i>	Hungary	1
<i>H. anthracophilum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. calyptosporum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. circinans</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. claviceps</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. crustuliniforme</i>	Chu-Chou & Grace (1983)	<i>Pseudotsuga menziesii</i>	N. Zealand	1
	Giltrap (1982)	<i>Betula</i>	UK	2
	Godbout & Fortin (1983)	<i>Alnus crispa</i> , <i>A. rugosa</i>	Canada	2
	Miller <i>et al.</i> (1990)	<i>A. rubra</i>	USA	5
	Voiry (1981)	<i>Quercus</i>	France	1
<i>H. cylindrosporum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. edurum</i>	Torres & Honrubia (1994)	<i>Pinus halepensis</i>	Spain	2
	Treu (1990a)	<i>Larix decidua</i>	Germany	1
	Treu (1990c)	<i>L. decidua</i>	Germany	1
<i>H. helodes</i>	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
<i>H. hiemale</i>	Fassi & De Vecchi (1962)	<i>Pinus strobus</i>	Italy	3
	Fontana (1964)	<i>Populus</i>	Italy	1

	Fontana (1964)	<i>Salix purpurea</i>	Italy	1
	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. ingratum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. leucosarx</i>	Giltrap (1982)	<i>Betula radiata</i>	UK	2
<i>H. longicaudum</i>	Duñabeitia <i>et al.</i> (1996)	<i>Pinus radiata</i>	Spain	3
	Fontana (1961)	<i>Populus</i>	Italy	1
	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. mesophaeum</i>	Fassi & Fontana (1966)	<i>Pinus strobus</i>	Italy	3
	Ingleby <i>et al.</i> (1990)	<i>Picea sitchensis</i>	UK	1
<i>H. minus</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. pumilum</i>	Granetti & Angelini (1992)	<i>Corylus avellana</i> , <i>Ostrya carpinifolia</i> , <i>Quercus ilex</i> , <i>Q. pubescens</i>	Italy	4
		<i>Betula</i>	UK	2
<i>H. pusillum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. radicosum</i>	Giltrap (1982)	<i>B. pendula</i>	UK	1
<i>H. saccharioides</i>	Ingleby <i>et al.</i> (1990)	<i>Betula</i>	UK	2
<i>H. sarcophyllum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. sinapizans</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. cfr sinapizans</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
<i>H. spoliatum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. subsaponaceum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. truncatum</i>	Giltrap (1982)	<i>Betula</i>	UK	2
<i>H. velutipes</i>	Giltrap (1982)	<i>Betula</i>	UK	2
	Haug (2002a)	<i>Picea abies</i>	Germany	1
<i>H. velutipes</i> group	Haug (2002b)	<i>P. abies</i>	Germany	1
<i>H. cortinarius</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
<i>Helianthemirhiza hirsuta</i>	Kovacs & Jakucs (2001)	<i>Helianthemum ovatum</i>	Hungary	1
<i>Humaria hemisphaerica</i>	Ingleby <i>et al.</i> (1990)	<i>Picea sitchensis</i>	UK	1
<i>H. caeruleum</i>	Kernaghan (2001)	<i>P. engelmannii</i>	Canada	1
<i>Hydnellum peckii</i>	Agerer (1993b)	<i>P. abies</i>	Germany	1
	Agerer (1993d)	<i>P. abies</i>	Germany	1
<i>Hydnum rufescens</i>	Agerer, Kraigher & Javornik (1996b)	<i>Picea abies</i>	Germany	1
	Kraigher & Agerer (1996)	<i>P. abies</i>	Germany	1
<i>Hygrophorus</i>	Bradbury <i>et al.</i> (1998)	<i>Pinus contorta</i>	Canada	1
	Kernaghan (2001)	<i>Abies lasiocarpa</i> , <i>Picea engelmannii</i>	Canada	1
<i>H. lucorum</i>	Treu (1990a)	<i>Larix decidua</i>	Germany	1
<i>H. pustulatus</i>	Gronbach (1988)	<i>Picea abies</i>	Germany	1
	Gronbach (1989a)	<i>P. abies</i>	Germany	1
<i>Hymenogaster citrinus</i>	Bencivenga, Donnini & Di Massimo (1992)	<i>Corylus avellana</i> , <i>Quercus pubescens</i>	Italy	4
	Donnini & Bencivenga (1995)	<i>C. avellana</i> , <i>Populus alba</i> , <i>Q. pubescens</i>	Italy	4
	Etayo & De Miguel (1998)	Not specified	Spain	4
<i>H. hessei</i>	Fontana & Centrella (1967)	<i>Quercus petraea</i>	Italy	1
<i>H. tener</i>	Fontana & Centrella (1967)	<i>Q. petraea</i>	Italy	1
<i>Hysterangium clathroides</i>	Fontana & Centrella (1967)	<i>Q. petraea</i>	Italy	1
<i>H. crassirhachis</i>	Müller & Agerer (1996a)	<i>Pseudotsuga menziesii</i>	Germany	1
	Müller & Agerer (1996c)	<i>P. menziesii</i>	Germany	1
<i>H. stoloniferum</i>	Raidl & Agerer (1998a)	<i>Picea abies</i>	Germany	1
<i>Inocybe</i>	Azul & Freitas (1999)	<i>Quercus suber</i>	Portugal	1
	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
<i>Inocybe (cont.)</i>	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Schramm (1966)	<i>Pinus virginiana</i>	USA	1
	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Kernaghan (2001)	<i>Dryas octopetala</i>	Canada	1
<i>I. albidodisca</i>	Hagerman <i>et al.</i> (2001)	<i>Pseudotsuga menziesii</i>	Canada	1
<i>I. appendiculata</i>	Beenken (1996a)	<i>Picea abies</i>	Germany	1
	Beenken, Agerer & Bahnweg (1996a)	<i>P. abies</i>	Germany	1
<i>I. avellana</i>	Ingleby (1999a)	<i>Shorea leprosula</i>	Indonesia	1
<i>I. fuscomarginata</i>	Beenken (1996b)	<i>Populus nigra</i>	Germany	1
	Beenken, Agerer & Bahnweg (1996b)	<i>Salix</i>	Germany	1
<i>I. heimii</i>	Jakucs (2002c)	<i>Fumana procumbens</i>	Hungary	1
	Magyar, Beenken & Jakucs (1999)	<i>F. procumbens</i>	Hungary	1
<i>I. lacera</i>	Cripps (1997a)	<i>Populus tremuloides</i>	USA	1
	Ingleby <i>et al.</i> (1990)	<i>Betula pendula</i>	UK	1
<i>I. obscuroidia</i>	Beenken (1996c)	<i>Picea abies</i>	Germany	1
	Beenken, Agerer & Bahnweg (1996c)	<i>P. abies</i>	Germany	1
<i>I. petiginosa</i>	Ingleby <i>et al.</i> (1990)	<i>P. sitchensis</i>	UK	1
<i>I. terrigena</i>	Beenken (1996d)	<i>Pinus sylvestris</i>	Germany	1
	Beenken, Agerer & Bahnweg (1996d)	<i>P. sylvestris</i>	Germany	1
<i>Ixocomus bovinus</i>	Fassi & De Vecchi (1962)	<i>P. strobus</i>	Italy	3
<i>Laccaria</i>	Di Battista <i>et al.</i> (2002)	<i>Pseudotsuga menziesii</i>	USA	3
	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
	Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1
<i>L. amethystina</i>	Brand (1988d)	<i>Fagus sylvatica</i>	Germany	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
<i>L. bicolor</i>	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
	Weiss (1991a)	<i>Picea abies</i>	Germany	2
<i>L. laccata</i>	Ceruti <i>et al.</i> (1988)	<i>Fagus sylvatica</i>	Italy	1
	Chu-Chou & Grace (1983)	<i>Pseudotsuga menziesii</i>	N. Zealand	1
	Dickie <i>et al.</i> (2004)	<i>Helianthemum bicknellii</i>	USA	1
	Fassi & Fontana (1966)	<i>Pinus strobus</i>	Italy	3
	Godbout & Fortin (1983)	<i>Alnus crispa</i> , <i>A. rugosa</i>	Canada	2
	Meotto (1988)	<i>Acacia dealbata</i>	Italy	1
	Miller <i>et al.</i> (1990)	<i>Alnus rubra</i>	USA	5
	Thomas & Jackson (1979)	<i>Picea sitchensis</i>	UK	3
	Torres <i>et al.</i> (1995)	<i>Cistus ladanifer</i>	Spain	3
<i>L. montana</i>	Kernaghan (2001)	<i>Abies lasiocarpa</i> , <i>Dryas octopetala</i> , <i>Picea engelmannii</i> , <i>Salix barrattiana</i>	Canada	1
<i>L. proxima</i>	Ingleby <i>et al.</i> (1990)	<i>Picea sitchensis</i>	UK	1
<i>L. tortilis</i>	Ingleby <i>et al.</i> (1990)	<i>P. sitchensis</i>	UK	1
<i>Lactarius</i>	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1
	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1

	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
	Hagerman <i>et al.</i> (1999)	Not specified	Canada	1
	Haug <i>et al.</i> (1994)	<i>Tsuga chinensis</i>	Taiwan	1
	Haug <i>et al.</i> (2005)	<i>Neea</i>	Ecuador	1
	Jones <i>et al.</i> (1997)	<i>Betula papyrifera</i> , <i>Pseudotsuga menziesii</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	5
	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
<i>L. acris</i>	Brand (1991)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1992b)	<i>F. sylvatica</i>	Germany	1
<i>L. akahatsu</i>	Yamada, Ogura & Ohmasa (2001)	<i>Pinus densiflora</i>	Japan	5
<i>L. ahicola</i>	Kernaghan, Currah & Bayer (1997)	<i>Picea engelmannii</i>	Canada	1
<i>L. alpinus</i>	Treu (1990a)	<i>Alnus viridis</i>	Germany	1
	Treu (1990d)	<i>A. viridis</i>	Germany	1
	Treu (1990a)	<i>Picea abies</i>	Germany	1
<i>L. badiosanguineus</i>	Treu (1990a)	<i>Pinus cembra</i>	Germany	1
	Treu (1990e)	<i>P. cembra</i>	Germany	1
<i>L. blennius</i>	Ceruti <i>et al.</i> (1988)	<i>Fagus sylvatica</i>	Italy	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Voiry (1981)	<i>Fagus</i>	France	1
<i>L. caespitosus</i>	Kernaghan <i>et al.</i> (1997)	<i>Abies lasiocarpa</i>	Canada	1
<i>L. camphoratus</i>	Brand (1991)	<i>Fagus sylvatica</i>	Germany	1
<i>L. cfr mutabilis</i>	Dickie <i>et al.</i> (2004)	<i>Helianthemum bicknellii</i>	USA	1
<i>L. chrysorrhoeus</i>	Luppi & Gautero (1967)	<i>Quercus petraea</i>	Italy	1
	Palfner (1998c)	<i>Q. robur</i>	Germany	1
<i>L. controversus</i>	Jakucs (2002a)	<i>Populus alba</i>	Hungary	1
	Jakucs (2002d)	<i>P. alba</i>	Hungary	1
	Jakucs, Majoros & Beenken (2001)	<i>P. alba</i>	Hungary	1
<i>L. decipiens</i>	Gronbach (1988)	<i>Picea abies</i>	Germany	1
<i>L. deliciosus</i>	Bradbury <i>et al.</i> (1998)	<i>Pinus contorta</i>	Canada	1
	Kernaghan <i>et al.</i> (1997)	<i>Abies lasiocarpa</i>	Canada	1
	Massicotte <i>et al.</i> (1999b)	<i>Pinus ponderosa</i> , <i>Pseudotsuga menziesii</i>	USA	3
	Torres & Honrubia (1994)	<i>P. halepensis</i>	Spain	2
<i>L. deterrimus</i>	Agerer (1986b)	<i>Picea abies</i>	Germany	1
	Agerer (1987e)	<i>P. abies</i>	Germany	1
	Münzenberger <i>et al.</i> (1986)	<i>P. abies</i>	Germany	2
<i>L. flexuosus</i>	Luppi & Gautero (1967)	<i>Quercus pubescens</i>	Italy	1
<i>L. glyciosmus</i>	Ingleby <i>et al.</i> (1990)	<i>Betula pendula</i>	UK	1
<i>L. hatsudake</i>	Yamada <i>et al.</i> (2001)	<i>Pinus densiflora</i>	Japan	5
<i>L. intermedius</i>	Eberhardt <i>et al.</i> (2000)	<i>Abies alba</i>	Italy	1
<i>L. lepidotus</i>	Wiedmer & Senn-Irlet (2004)	<i>Alnus viridis</i>	Switzerland	1
<i>L. lignyotus</i>	Kraigher, Agerer & Javornik (1995)	<i>Picea abies</i>	Slovenia	1
<i>L. lilacinus</i>	Pritsch <i>et al.</i> (1997)	<i>Alnus glutinosa</i>	Germany	1
<i>L. mitissimus</i>	Weiss (1991a)	<i>Picea abies</i>	Germany	2
<i>L. obscuratus</i>	Miller <i>et al.</i> (1990)	<i>Alnus rubra</i>	USA	5
	Pritsch <i>et al.</i> (1997)	<i>A. glutinosa</i>	Germany	1
<i>L. omphaliformis</i>	Pritsch <i>et al.</i> (1997)	<i>A. glutinosa</i>	Germany	1
<i>L. pallidus</i>	Brand (1991h)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1991i)	<i>F. sylvatica</i>	Germany	1

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
<i>Lactarius paradoxus</i>	Danielson (1984b)	<i>Pinus banksiana</i>	Canada	2
<i>L. picinus</i>	Agerer (1986b)	<i>Picea abies</i>	Germany	1
	Agerer (1987f)	<i>P. abies</i>	Germany	1
<i>L. piperatus</i>	Luppi & Gautero (1967)	<i>Quercus petraea</i>	Italy	1
<i>L. porninsis</i>	Treu (1990a)	<i>Larix decidua</i>	Germany	1
	Treu (1990f)	<i>L. decidua</i>	Germany	1
<i>L. pterosporus</i>	Ceruti <i>et al.</i> (1988)	<i>Fagus sylvatica</i>	Italy	1
<i>L. pubescens</i>	Ingleby <i>et al.</i> (1990)	<i>Betula pendula</i>	UK	1
<i>L. rubrilacteus</i>	Eberhart & Luoma (1997)	<i>Pseudotsuga menziesii</i>	USA	1
<i>L. rubrocinctus</i>	Brand (1991i)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1991j)	<i>F. sylvatica</i>	Germany	1
<i>L. rufus</i>	Ingleby <i>et al.</i> (1990)	<i>Picea sitchensis</i>	UK	1
	Wöllecke (2001)	<i>Pinus sylvestris</i>	Germany	1
<i>L. salmonicolor</i>	Eberhardt <i>et al.</i> (2000)	<i>Abies alba</i>	Italy	1
	Pillukat (1996)	<i>A. alba</i>	Germany	1
<i>L. salmonicolor</i>	Pillukat (1998)	<i>A. alba</i>	Germany	1
<i>L. scrobiculatus</i>	Kernaghan & Berch (1997)	<i>Tsuga heterophylla</i>	Canada	1
<i>L. subdulcis</i>	Brand (1987a)	<i>Fagus sylvatica</i>	Germany	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
<i>L. subsericatus</i>	Eberhardt <i>et al.</i> (2000)	<i>Abies alba</i>	Italy	1
<i>L. tesquorum</i>	Nuytinck <i>et al.</i> (2004)	<i>Cistus</i>	Italy	1
<i>L. theiogalus</i>	Gronbach (1988)	<i>Picea abies</i>	Germany	1
<i>L. vellereus</i>	Brand (1987b)	<i>Fagus sylvatica</i>	Germany	1
	Ceruti <i>et al.</i> (1988)	<i>F. sylvatica</i>	Italy	1
	Luppi & Gautero (1967)	<i>Quercus petraea</i>	Italy	1
<i>L. vietus</i>	Hagerman <i>et al.</i> (2001)	<i>Pseudotsuga menziesii</i>	Canada	1
<i>Laricirhiza alpina</i>	Treu (1990a)	<i>Larix decidua</i>	Germany	1
	Treu (1990g)	<i>L. decidua</i>	Germany	1
<i>Leccinum</i>	Bradbury <i>et al.</i> (1998)	<i>Pinus contorta</i>	Canada	1
	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
	Ingleby <i>et al.</i> (1990)	<i>Betula pendula</i>	UK	1
<i>L. holopus</i>	Godbout & Fortin (1983)	<i>Alnus crispa, A. rugosa</i>	Canada	2
<i>L. scabrum</i>	Müller & Agerer (1991)	<i>Betula pendula</i>	Germany	1
<i>L. subleucophaeum</i>	Godbout & Fortin (1983)	<i>Alnus crispa, A. rugosa</i>	Canada	2
<i>Leucangium carthusianum</i>	Palfner & Agerer (1998b)	<i>Pseudotsuga menziesii</i>	USA	1
	Palfner (1998d)	<i>P. menziesii</i>	USA	1
<i>Lyophyllum decastes</i>	Agerer & Beenken (1998b)	<i>Quercus robur</i>	Germany	1
	Agerer (1998c)	<i>Q. robur</i>	Germany	1
<i>L. semitale</i>	Yamada <i>et al.</i> (2001)	<i>Pinus densiflora</i>	Japan	5
<i>L. shimeji</i>	Yamada <i>et al.</i> (2001)	<i>P. densiflora</i>	Japan	5
<i>Melanogaster broomeianus</i>	Wiedmer <i>et al.</i> (2004)	<i>Alnus viridis</i>	Switzerland	1
<i>M. variegatus</i>	Giraud (1988)	Not specified	France	4
<i>Naucoria escharoides</i>	Becerra <i>et al.</i> (2002)	<i>Alnus acuminata</i>	Argentina	1
	Pritsch <i>et al.</i> (1997)	<i>A. glutinosa</i>	Germany	1

<i>N. subconspersa</i>	Pritsch <i>et al.</i> (1997)	<i>A. glutinosa</i>	Germany	1
<i>Nothofagirhiza reticulosa</i>	Palfner (2001)	<i>Nothofagus pumilio</i>	Chile	1
<i>N. tricystidiis</i>	Palfner (2001)	<i>N. oblicua</i>	Chile	1
<i>N. vesiculosa</i>	Palfner (2001)	<i>N. dombeyi</i>	Chile	1
<i>N. vinicolor</i>	Palfner (2001)	<i>N. pumilio</i>	Chile	1
	Palfner & Godoy (1996a)	<i>N. pumilio</i>	Chile	1
	Palfner & Godoy (1996c)	<i>N. pumilio</i>	Chile	1
<i>Pasanirhiza strigosa</i>	Haug <i>et al.</i> (1994)	<i>Pasania glabra</i>	Taiwan	1
<i>Paxillus</i>	Jones <i>et al.</i> (1997)	<i>Betula papyrifera</i> , <i>Pseudotsuga menziesii</i>	Canada	5
<i>P. involutus</i>	Agerer & Gronbach (1989)	<i>Picea abies</i>	Germany	1
<i>P. involutus</i>	Godbout & Fortin (1983)	<i>Alnus crispa</i> , <i>A. rugosa</i>	Canada	2
	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
	Gronbach (1988)	<i>Picea abies</i>	Germany	1
	Ingleby <i>et al.</i> (1990)	<i>Betula pendula</i>	UK	1
	Miller <i>et al.</i> (1990)	<i>Alnus rubra</i>	USA	5
	Mleczko (1997a)	<i>Pinus sylvestris</i>	Poland	1
<i>Pezizaceae</i>	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
<i>Pezizalean</i>	Dickie <i>et al.</i> (2004)	<i>Helianthemum bicknellii</i>	USA	1
<i>Pezizales</i>	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
	Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1
	Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1
<i>Phellodon niger</i>	Agerer (1993c)	<i>Picea abies</i>	Germany	1
<i>Phialocephala fortinii</i>	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
<i>Piceirhiza bicolorata</i>	Brand, Gronbach & Taylor (1992)	<i>Picea abies</i>	Germany	1
	Gronbach (1988)	<i>P. abies</i>	Germany	1
<i>P. chordata</i>	Gronbach (1988)	<i>P. abies</i>	Germany	1
	Gronbach (1989b)	<i>P. abies</i>	Germany	1
<i>P. conspicua</i>	Gronbach (1988)	<i>P. abies</i>	Germany	1
	Gronbach (1989c)	<i>P. abies</i>	Germany	1
<i>P. cornuta</i>	Montecchio & Agerer (1997)	<i>P. abies</i>	Italy	1
<i>P. cortinacearum</i>	Haug (2002b)	<i>P. abies</i>	Germany	1
<i>P. gelatinosa</i>	Berg & Gronbach (1989)	<i>P. abies</i>	Germany	1
	Gronbach (1988)	<i>P. abies</i>	Germany	1
<i>P. glutinosa</i>	Gronbach (1988)	<i>P. abies</i>	Germany	1
	Gronbach (1989d)	<i>P. abies</i>	Germany	1
<i>P. guttata</i>	Gronbach (1988)	<i>P. abies</i>	Germany	1
	Gronbach (1989e)	<i>P. abies</i>	Germany	1
<i>P. horti-atrata</i>	Al Sayegh & Kraigher (1999)	<i>P. abies</i>	Slovenia	1
<i>P. internicrassihyphis</i>	Agerer (2002e)	<i>P. abies</i>	Germany	1
<i>P. nigra</i>	Berg & Gronbach (1988)	<i>P. abies</i>	Germany	1
	Gronbach (1988)	<i>P. abies</i>	Germany	1
<i>P. obscura</i>	Gronbach & Berg (1988)	<i>P. abies</i>	Germany	1
	Gronbach (1988)	<i>P. abies</i>	Germany	1
<i>P. oleiferans</i>	Waller <i>et al.</i> (1993)	<i>P. abies</i>	Germany	1
<i>P. rufosimilis</i>	Gronbach (1988)	<i>P. abies</i>	Germany	1
<i>P. stagonopleres</i>	Beenken & Agerer (1996)	<i>P. abies</i>	Germany	1
<i>P. tomentellarum</i>	Haug (2002b)	<i>P. abies</i>	Germany	1

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
<i>Picoa lefebvrei</i>	Gutierrez, Morte & Honrubia (2003)	<i>Helianthemum almeriense</i>	Spain	2
<i>Piloderma</i>	Hagerman <i>et al.</i> (1999)	Not specified	Canada	1
	Hagerman <i>et al.</i> (2001)	<i>Pseudotsuga menziesii</i>	Canada	1
	Massicotte <i>et al.</i> (1999b)	<i>Pinus ponderosa</i>	USA	3
<i>P. byssinum</i>	Bradbury (1998)	<i>P. contorta</i>	Canada	1
	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
<i>P. croceum</i>	Brand (1991j)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1991l)	<i>F. sylvatica</i>	Germany	1
<i>P. fallax</i>	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1
	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
	Goodman & Trofymow (1996)	<i>Pseudotsuga menziesii</i>	Canada	1
	Kernaghan (2001)	<i>Picea engelmannii</i>	Canada	1
<i>Pinirhiza aciculata</i>	Haug <i>et al.</i> (1994)	<i>Pinus taiwanensis</i>	Taiwan	1
<i>P. amyloidea</i>	Mleczko (2002d)	<i>P. sylvestris</i>	Poland	1
	Mleczko (2004d)	<i>P. sylvestris</i>	Poland	1
<i>P. arachnorosea</i>	Wöllecke, Münzenberger & Hüttl (1997a)	<i>P. sylvestris</i>	Germany	1
	Wöllecke, Münzenberger & Hüttl (1998c)	<i>P. sylvestris</i>	Germany	1
<i>P. cephalocystidia</i>	Wöllecke, Münzenberger & Hüttl (1999a)	<i>P. sylvestris</i>	Germany	1
<i>P. crystallonitida</i>	Mleczko (2002e)	<i>P. sylvestris</i>	Poland	1
	Mleczko (2004e)	<i>P. sylvestris</i>	Poland	1
<i>P. cyaneoviridis</i>	Golldack, Münzenberger & Hüttl (1998a)	<i>P. sylvestris</i>	Germany	1
	Golldack, Münzenberger & Hüttl (1998c)	<i>P. sylvestris</i>	Germany	1
<i>P. dimorpha</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
	Golldack, Münzenberger & Hüttl (1999a)	<i>Pinus sylvestris</i>	Germany	1
<i>P. discolor</i>	Golldack, Münzenberger & Hüttl (1998b)	<i>P. sylvestris</i>	Germany	1
	Golldack, Münzenberger & Hüttl (1998d)	<i>P. sylvestris</i>	Germany	1
<i>P. echinata</i>	Haug <i>et al.</i> (1994)	<i>P. taiwanensis</i>	Taiwan	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
<i>P. epidermoides</i>	Haug <i>et al.</i> (1994)	<i>P. taiwanensis</i>	Taiwan	1
<i>P. flexipila</i>	Golldack, Münzenberger & Hüttl (1999b)	<i>P. sylvestris</i>	Germany	1
<i>P. globulifera</i>	Mleczko (1998a)	<i>P. sylvestris</i>	Poland	1
<i>P. gomphidioidea</i>	Mleczko (1998b)	<i>P. sylvestris</i>	Poland	1
	Mleczko (1998c)	<i>P. sylvestris</i>	Poland	1
<i>P. granulosa</i>	Golldack <i>et al.</i> (1996a)	<i>P. sylvestris</i>	Germany	1
	Golldack, Münzenberger & Hüttl (1996c)	<i>P. sylvestris</i>	Germany	1
<i>P. hyphocystidia</i>	Wöllecke, Münzenberger & Hüttl (1999b)	<i>P. sylvestris</i>	Germany	1
<i>P. lactariosimilis</i>	Golldack, Münzenberger & Hüttl (1997a)	<i>P. sylvestris</i>	Germany	1
<i>P. lactogelatinosa</i>	Golldack, Münzenberger & Hüttl (1997b)	<i>P. sylvestris</i>	Germany	1
<i>P. ligulata</i>	Mleczko (2002f)	<i>P. sylvestris</i>	Poland	1
	Mleczko (2004f)	<i>P. sylvestris</i>	Poland	1
<i>P. lutea</i>	Mleczko (1996a)	<i>P. sylvestris</i>	Poland	1
	Mleczko (1996b)	<i>P. sylvestris</i>	Poland	1
<i>P. luteoalba</i>	Wöllecke, Münzenberger & Hüttl (1997b)	<i>P. sylvestris</i>	Germany	1
<i>P. luteomicacea</i>	Mleczko (2002g)	<i>P. sylvestris</i>	Poland	1
	Mleczko (2004g)	<i>P. sylvestris</i>	Poland	1

<i>P. nigra</i>	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
<i>P. rufomaculata</i>	Wöllecke, Münzenberger & Hüttl (1998a)	<i>P. sylvestris</i>	Germany	1
	Wöllecke, Münzenberger & Hüttl (1998d)	<i>P. sylvestris</i>	Germany	1
<i>P. stellamulata</i>	Gollmack <i>et al.</i> (1996b)	<i>P. sylvestris</i>	Germany	1
	Gollmack <i>et al.</i> (1996d)	<i>P. sylvestris</i>	Germany	1
<i>P. subalpina</i>	Treu (1990a)	<i>P. cembra</i>	Germany	1
<i>P. sulphurea</i>	Wöllecke, Münzenberger & Hüttl (1998b)	<i>P. sylvestris</i>	Germany	1
<i>Pisolithus</i>	Águeda <i>et al.</i> (2001)	<i>Quercus ilex</i>	Spain	4
	Moyersoen & Beever (2004)	<i>Kunzea ericoides</i>	N. Zealand	1
	Moyersoen & Beever (2004)	<i>Leptospermum scoparium</i>	N. Zealand	1
<i>P. aurantioscabrosus</i>	Watling <i>et al.</i> (1995a)	<i>Shorea parviflora</i>	Malaysia	1
	Watling <i>et al.</i> (1995b)	<i>S. parviflora</i>	Malaysia	1
<i>P. tinctorius</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
	Godbout & Fortin (1983)	<i>Alnus crispa, A. rugosa</i>	Canada	2
	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
	Rose <i>et al.</i> (1981)	<i>Eucalyptus nova-anglica</i>	USA	1
	Torres & Honrubia (1994)	<i>Torinus halepensis</i>	Spain	2
	Weiss (1991b)	<i>Picea abies</i>	Germany	1
	Weiss (1992)	<i>P. abies</i>	Germany	1
<i>Polyporoletus sublividus</i>	Agerer & Ammirati (1998)	<i>Abies amabilis</i>	USA	1
	Agerer, Beenken & Ammirati (1998b)	<i>A. amabilis</i>	USA	1
<i>Populirhiza pustulosa</i>	Mleczko (1997b)	<i>Populus tremula</i>	Poland	1
	Mleczko (1998d)	<i>P. tremula</i>	Poland	1
<i>Pseudotomentella tristis</i>	Agerer (1994b)	<i>Salix herbacea</i>	Germany	1
<i>Pseudotsugaerhiza baculifera</i>	Müller & Agerer (1996b)	<i>Pseudotsuga menziesii</i>	Germany	1
	Müller & Agerer (1996d)	<i>P. menziesii</i>	Germany	1
<i>Pulvinulla constellatio</i>	Amicucci <i>et al.</i> (2001)	<i>Quercus pubescens</i>	Italy	3
	Bencivenga <i>et al.</i> (1995)	Not specified	Italy	3
<i>Quercirhiza alboviolacea</i>	Jakucs (2001)	<i>Quercus robur</i>	Hungary	1
	Jakucs (2002e)	<i>Q. robur</i>	Hungary	1
<i>Q. araneosa</i>	Montecchio <i>et al.</i> (1999a)	<i>Q. ilex</i>	Italy	1
<i>Q. argenteobrunneola</i>	Fischer & Agerer (1996)	<i>Q. ilex</i>	Spain	1
<i>Q. atrata</i>	Al Sayegh & Kraigher (1999)	<i>Picea abies</i>	Slovenia	1
<i>Q. bicolor</i>	Montecchio <i>et al.</i> (1999b)	<i>Quercus ilex</i>	Italy	1
<i>Q. cistidiophora</i>	Montecchio <i>et al.</i> (2004)	<i>Q. ilex</i>	Italy	1
<i>Q. cumulosa</i>	De Román & De Miguel (2005)	<i>Q. ilex</i>	Spain	1
	De Román, Agerer & De Miguel (2002a)	<i>Q. ilex</i>	Spain	1
<i>Q. ectendotrophica</i>	Azul, Agerer & Freitas (2001a)	<i>Q. suber</i>	Portugal	1
<i>Q. fibulocystidiata</i>	Jakucs, Agerer & Bratek (1997)	<i>Quercus</i>	Hungary	1
	Jakucs, Agerer & Bratek (1998c)	<i>Quercus</i>	Hungary	1
<i>Q. incrustata</i>	Montecchio, Rossi & Causin (2001b)	<i>Q. ilex</i>	Italy	1
<i>Q. internangularis</i>	Azul, Agerer & Freitas (2001b)	<i>Q. suber</i>	Portugal	1
<i>Q. nodulosomorpha</i>	Azul & Freitas (1999)	<i>Q. suber</i>	Portugal	1
	Azul, Agerer & Freitas (1999)	<i>Q. suber</i>	Portugal	1
<i>Q. pedicae</i>	Azul, Agerer & Freitas (2001c)	<i>Q. suber</i>	Portugal	1
<i>Q. russulocystidiata</i>	Azul, Agerer & Freitas (2001d)	<i>Q. suber</i>	Portugal	1
<i>Q. sclerotiigera</i>	Azul, Agerer & Freitas (2001e)	<i>Q. suber</i>	Portugal	1
<i>Q. squamosa</i>	Palfner (1995a)	<i>Q. robur</i>	Slovenia	1

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
	Palfner & Agerer (1996)	<i>Q. robur</i>	Slovenia	1
<i>Quercirhiza stellata</i>	De Román, Agerer & De Miguel (2002b)	<i>Quercus ilex</i>	Spain	1
<i>Q. sublutea</i>	Montecchio <i>et al.</i> (1998a)	<i>Q. ilex</i>	Italy	1
	Montecchio <i>et al.</i> (1998b)	<i>Q. ilex</i>	Italy	1
<i>Ramaria</i>	Nouhra <i>et al.</i> (2005)	<i>Pseudotsuga menziesii</i> , <i>Tsuga heterophylla</i>	USA	1
<i>R. aurea</i>	Agerer (1996c)	<i>Fagus sylvatica</i>	Germany	1
<i>R. largentii</i>	Agerer (1996d)	<i>Picea abies</i>	Germany	1
	Agerer (1996h)	<i>P. abies</i>	Germany	1
<i>R. spinulosa</i>	Agerer (1996e)	<i>Fagus sylvatica</i>	Germany	1
<i>R. subbotrytis</i>	Agerer (1996f)	<i>Quercus robur</i>	Germany	1
	Agerer (1998d)	<i>Q. robur</i>	Germany	1
<i>Rhizopogon</i>	Al Sayegh & Kraigher (2000)	<i>Fagus</i>	Slovenia	1
	Chu-Chou & Grace (1983)	<i>Pseudotsuga menziesii</i>	N. Zealand	1
	Di Battista <i>et al.</i> (2002)	<i>P. menziesii</i>	USA	3
	Hagerman <i>et al.</i> (2001)	<i>P. menziesii</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>P. menziesii</i>	Canada	5
	Torres & Honrubia (1997)	<i>Pinus halepensis</i>	Spain	3
	Danielson <i>et al.</i> (1984)	<i>P. banksiana</i>	Canada	3
<i>R. arctostaphyli</i>	Massicotte <i>et al.</i> (1999a)	<i>P. ponderosa</i>	Canada	3
<i>R. ellenae</i>	Massicotte <i>et al.</i> (1999a)	<i>P. ponderosa</i>	Canada	3
<i>R. flavofibrillosus</i>	Massicotte <i>et al.</i> (1999a)	<i>P. ponderosa</i>	Canada	3
<i>R. luteolus</i>	Mohan, Natarajan & Ingleby (1993)	<i>P. patula</i>	India	3
	Uhl (1988b)	<i>P. sylvestris</i>	Germany	1
<i>R. melanogastroides</i>	Raidl (1998a)	<i>P. mugo</i>	Germany	1
	Raidl, Beenken & Agerer (1998)	<i>P. mugo</i>	Germany	1
<i>R. occidentalis</i>	Massicotte <i>et al.</i> (1999a)	<i>P. ponderosa</i>	Canada	3
<i>R. parksii</i>	Massicotte <i>et al.</i> (2000)	<i>Pseudotsuga menziesii</i>	Canada	3
<i>R. roseolus</i>	Raidl & Agerer (1998b)	<i>Pinus sylvestris</i>	Germany	1
	Torres & Honrubia (1994)	<i>P. halepensis</i>	Spain	2
<i>R. rubescens</i>	Fontana & Centrella (1967)	<i>P. sylvestris</i>	Italy	1
	Massicotte <i>et al.</i> (1999b)	<i>Arbutus menziesii</i> , <i>Pinus ponderosa</i>	USA	3
	Yamada <i>et al.</i> (2001)	<i>P. densiflora</i>	Japan	5
<i>R. subcaerulescens</i>	Agerer (1996i)	<i>Tsuga heterophylla</i>	Germany	1
	Agerer, Müller & Bahnweg (1996c)	<i>T. heterophylla</i>	Germany	1
	Massicotte <i>et al.</i> (1999a)	<i>Pinus ponderosa</i>	Canada	3
	Massicotte <i>et al.</i> (2000)	<i>Pseudotsuga menziesii</i>	Canada	3
<i>R. truncatus</i>	Massicotte <i>et al.</i> (1999a)	<i>Pinus ponderosa</i>	Canada	3
	Massicotte <i>et al.</i> (1999b)	<i>P. ponderosa</i>	USA	3
<i>R. vinicolor</i>	Chu-Chou & Grace (1983)	<i>Pseudotsuga menziesii</i>	N. Zealand	1
	Massicotte <i>et al.</i> (2000)	<i>P. menziesii</i>	Canada	3
	Zak (1971)	<i>P. menziesii</i>	USA	1
<i>R. vinicolor</i> -like	Goodman (1996e)	<i>P. menziesii</i>	Canada	1
<i>R. vulgaris</i>	Jakucs & Bratek (1998b)	<i>Pinus nigra</i>	Hungary	1
	Jakucs <i>et al.</i> (1998b)	<i>P. nigra</i>	Hungary	1
<i>Rhodocollybia butyracea</i>	Mleczko (2002h)	<i>P. sylvestris</i>	Poland	1
	Mleczko (2004h)	<i>P. sylvestris</i>	Poland	1

<i>Rhodopaxillus nudus</i>	Fontana (1961)	<i>Populus</i>	Italy	1
<i>Riessia radiculicola</i>	See <i>et al.</i> (1997)	<i>Shorea leprosula</i>	Malaysia	1
<i>Riessiella clavata</i>	See <i>et al.</i> (1997)	<i>S. leprosula</i>	Malaysia	1
<i>Rozites caperatus</i>	Agerer (1999b)	<i>Pinus sylvestris</i>	Germany	1
	Agerer (2002d)	<i>P. sylvestris</i>	Germany	1
<i>Russula</i>	Azul & Freitas (1999)	<i>Quercus suber</i>	Portugal	1
	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1
	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Jones <i>et al.</i> (1997)	<i>Betula papyrifera</i>	Canada	1
	Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>Pseudotsuga menziesii</i>	Canada	5
	Massicotte <i>et al.</i> (1999b)	<i>Lithocarpus densiflora</i> , <i>Pinus ponderosa</i> , <i>P. menziesii</i>	USA	3
		<i>Picea abies</i>	Germany	1
<i>R. acrifolia</i>	Agerer (1996j)	<i>Betula pendula</i>	Germany	1
<i>R. aeruginea</i>	Beenken (2001a)	<i>Helianthemum bicknellii</i>	USA	1
<i>R. aff. amoenolens</i>	Dickie <i>et al.</i> (2004)	<i>H. bicknellii</i>	USA	1
<i>R. aff. pectinatoides</i>	Dickie <i>et al.</i> (2004)	<i>Alnus viridis</i>	Germany	1
<i>R. alnetorum</i>	Beenken (2001b)	<i>Populus alba</i>	Hungary	1
<i>R. amoenolens</i>	Jakucs & Beenken (1999)	<i>P. alba</i>	Hungary	1
	Jakucs (2002a)	<i>P. alba</i>	Hungary	1
	Jakucs (2002a)	<i>P. alba</i>	Hungary	1
	Jakucs (2002f)	<i>P. alba</i>	Hungary	1
<i>R. atroglauca</i>	Beenken (2001c)	<i>Betula pubescens</i>	Germany	1
<i>R. brevipes</i>	Kernaghan <i>et al.</i> (1997)	<i>Abies lasiocarpa</i>	Canada	1
<i>R. cyanoxantha</i>	Beenken (2001d)	<i>Fagus sylvatica</i>	Germany	1
<i>R. decolorans</i>	Fransson (2004b)	<i>Pinus sylvestris</i>	Sweden	1
<i>R. delica</i>	Beenken (2001e)	<i>Tilia</i>	Germany	1
	Yamada (1998a)	<i>Betula platyphylla</i>	Japan	1
<i>R. densifolia</i>	Beenken (2001f)	<i>Fagus sylvatica</i>	Germany	1
	Beenken (2001g)	<i>Picea abies</i>	Germany	1
	Ceruti <i>et al.</i> (1988)	<i>Fagus sylvatica</i>	Italy	1
	Eberhart & Luoma (2000)	<i>Pseudotsuga menziesii</i>	USA	1
<i>R. firmula</i>	Treu (1990a)	<i>Pinus mugo</i>	Germany	1
	Treu (1990h)	<i>P. mugo</i>	Germany	1
<i>R. foetens</i>	Beenken (2001h)	<i>Fagus sylvatica</i>	Germany	1
<i>R. fuegiana</i>	Palfner (2001)	<i>Nothofagus pumilio</i>	Chile	1
	Palfner & Godoy (1996b)	<i>N. pumilio</i>	Chile	1
	Palfner & Godoy (1996d)	<i>N. pumilio</i>	Chile	1
<i>R. illota</i>	Brand (1991k)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1991l)	<i>Fagus sylvatica</i>	Germany	1
<i>R. integra</i>	Kernaghan (2001)	<i>Abies lasiocarpa</i>	Canada	1
<i>R. laricina</i>	Treu (1990a)	<i>Larix decidua</i>	Germany	1
	Treu (1990i)	<i>L. decidua</i>	Germany	1
<i>R. mairei</i>	Brand (1991c)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1991l)	<i>F. sylvatica</i>	Germany	1

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
<i>Russula medullata</i>	Beenken (2001i)	<i>Populus tremula</i>	Germany	1
<i>R. nigricans</i>	Hagerman <i>et al.</i> (2001)	<i>Pseudotsuga menziesii</i>	Canada	1
	Mleczko (2002i)	<i>Pinus sylvestris</i>	Poland	1
	Mleczko (2004i)	<i>P. sylvestris</i>	Poland	1
	Yamada (1998b)	<i>Betula platyphylla</i>	Japan	1
<i>R. nothofaginea</i>	Beenken (2001j)	<i>Nothofagus dombeyi</i>	Germany	1
<i>R. ochroleuca</i>	Agerer (1986b)	<i>Picea abies</i>	Germany	1
	Agerer (1987g)	<i>P. abies</i>	Germany	1
	Brand (1991l)	<i>Fagus sylvatica</i>	Germany	1
	Gronbach (1988)	<i>Picea abies</i>	Germany	1
	Wöllecke (2001)	<i>Pinus sylvestris</i>	Germany	1
<i>R. puiggarii</i>	Haug <i>et al.</i> (2005)	<i>Neea</i>	Ecuador	1
<i>R. pumila</i>	Pritsch <i>et al.</i> (1997)	<i>Alnus glutinosa</i>	Germany	1
<i>R. sanguinea</i>	Duñabeitia <i>et al.</i> (1996)	<i>Pinus radiata</i>	Spain	3
<i>R. sardonja</i>	Mleczko (2002j)	<i>P. sylvestris</i>	Poland	1
	Mleczko (2004j)	<i>P. sylvestris</i>	Poland	1
<i>R. silvicola</i>	Kernaghan <i>et al.</i> (1997)	<i>Abies lasiocarpa</i>	Canada	1
<i>R. versicolor</i>	Beenken (2001k)	<i>Betula pubescens</i>	Germany	1
<i>R. vesca</i>	Beenken (2001l)	<i>Quercus robur</i>	Germany	1
	Luppi & Gautero (1967)	<i>Q. petraea</i>	Italy	1
<i>R. vinosa</i>	Beenken (2001m)	<i>Picea abies</i>	Germany	1
<i>R. violascens</i>	Luppi & Gautero (1967)	<i>Quercus petraea</i>	Italy	1
<i>R. virescens</i>	Beenken (2001n)	<i>Q. robur</i>	Germany	1
<i>R. xerampelina</i>	Agerer (1986b)	<i>Picea abies</i>	Germany	1
	Agerer (1987h)	<i>P. abies</i>	Germany	1
<i>Russulaceae</i>	See <i>et al.</i> (1997)	<i>Shorea leprosula</i>	Malaysia	1
<i>Russula</i> -like	Goodman (1997b)	<i>Tsuga heterophylla</i>	Canada	1
<i>Sarcodon imbricatus</i>	Agerer (1991c)	<i>Picea abies</i>	Germany	1
SB (spinules buclées, Giraud 1988)	Giraud (1988)	Not specified	France	4
	Sáez & De Miguel (1995)	Not specified	Spain	4
<i>Scleroderma</i>	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
	See <i>et al.</i> (1997)	<i>Shorea leprosula</i>	Malaysia	1
<i>S. areolatum</i>	Meotto, Pellegrino & Craddock (1994)	<i>Castanea sativa</i>	Italy	3
<i>S. aurantium</i>	Voiry (1981)	<i>Quercus</i>	France	1
<i>S. bovista</i>	Jakucs & Agerer (1999a)	<i>Populus alba</i>	Hungary	1
	Jakucs (2002a)	<i>P. alba</i>	Hungary	1
	Jakucs (2002g)	<i>P. alba</i>	Hungary	1
<i>S. citrinum</i>	Brunner <i>et al.</i> (1992)	<i>Picea abies</i>	Switzerland	2
	Godbout & Fortin (1983)	<i>Alnus crispa</i> , <i>A. rugosa</i>	Canada	2
	Mohan <i>et al.</i> (1993)	<i>Pinus patula</i>	India	3
	Richter & Bruhn (1990)	<i>Larix decidua</i>	USA	2
	Waller & Agerer (1993)	<i>Betula pendula</i>	Germany	1
<i>S. geaster</i>	Rose <i>et al.</i> (1981)	<i>Eucalyptus nova-anglica</i>	USA	1

<i>S. polyrhizum</i>	Duñabeitia <i>et al.</i> (1996)	<i>Pinus radiata</i>	Spain	3
<i>S. sinnamarensense</i>	Ingleby (1999b)	<i>Gnetum africanum</i>	Cameroon	1
<i>Sebacina</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
<i>S. incrustans</i>	Urban, Weiss & Bauer (2003)	<i>Picea abies</i>	Austria	1
<i>Sebacinaceae</i>	Selosse <i>et al.</i> (2002)	<i>Carpinus</i>	France	1
	Selosse <i>et al.</i> (2002)	<i>Corylus</i>	France	1
Sebacinoid	Urban <i>et al.</i> (2003)	<i>Tilia</i>	Austria	1
<i>Sphaerosporella brunnea</i>	Bencivenga <i>et al.</i> (1995)	Not specified	Italy	3
	Danielson (1984a)	<i>Pinus banksiana</i>	Canada	2
	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
	Di Massimo <i>et al.</i> (1996)	<i>Q. ilex</i>	Spain	3
	Meotto & Carraturo (1988)	<i>Populus nigra</i>	Italy	3
<i>Stephanopus stropharioides</i>	Palfner (2001)	<i>Nothofagus dombeyi</i>	Chile	1
<i>Suillus</i>	Torres & Honrubia (1997)	<i>Pinus halepensis</i>	Spain	3
<i>S. bovinus</i>	Yamada <i>et al.</i> (2001)	<i>P. densiflora</i>	Japan	5
<i>S. brevipes</i>	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
<i>S. caerulescens</i>	Hoch, Goodman & Chyplik (1998)	<i>Pseudotsuga menziesii</i>	Canada	1
<i>S. collinitus</i>	Torres & Honrubia (1994)	<i>Pinus halepensis</i>	Spain	2
<i>S. flavus</i>	Treu (1990a)	<i>Larix decidua</i>	Germany	1
	Treu (1990j)	<i>L. decidua</i>	Germany	1
<i>S. granulatus</i>	Yamada <i>et al.</i> (2001)	<i>Pinus densiflora</i>	Japan	5
<i>S. laricinus</i>	Treu (1990a)	<i>Larix decidua</i>	Germany	1
	Treu (1993)	<i>L. decidua</i>	Germany	1
<i>S. luteus</i>	Torres & Honrubia (1994)	<i>Pinus halepensis</i>	Spain	2
	Yamada <i>et al.</i> (2001)	<i>P. densiflora</i>	Japan	5
<i>S. plorans</i>	Treu (1990a)	<i>P. cembra</i>	Germany	1
	Treu (1990k)	<i>P. cembra</i>	Germany	1
<i>S. sibiricus</i>	Treu (1990a)	<i>P. cembra</i>	Germany	1
	Treu (1990l)	<i>P. cembra</i>	Germany	1
<i>S. tomentosus</i>	Bradbury (1998)	<i>P. contorta</i>	Canada	1
	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
	Danielson (1984b)	<i>P. banksiana</i>	Canada	2
<i>S. tridentinus</i>	Treu (1990a)	<i>Larix decidua</i>	Germany	1
<i>S. umbonatus</i>	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1
	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
<i>S. variegatus</i>	Torres & Honrubia (1994)	<i>P. halepensis</i>	Spain	2
<i>Terfezia clavervyi</i>	Gutierrez <i>et al.</i> (2003)	<i>Helianthemum almeriense</i>	Spain	2
<i>Tetraberliniaerhiza bicolor</i>	Moyersoen (1996a)	<i>Tetraberlinia bifoliolata</i>	Cameroon	1
	Moyersoen (1996d)	<i>T. bifoliolata</i>	Cameroon	1
<i>T. cerviformis</i>	Moyersoen (1996b)	<i>T. bifoliolata</i>	Cameroon	1
	Moyersoen (1996e)	<i>T. bifoliolata</i>	Cameroon	1
<i>T. heterocystidiae</i>	Moyersoen (1996c)	<i>T. bifoliolata</i>	Cameroon	1
	Moyersoen (1996f)	<i>T. bifoliolata</i>	Cameroon	1
<i>Thaxterogaster albocanus</i>	Palfner (1996a)	<i>Nothofagus pumilio</i>	Chile	1
	Palfner (1996b)	<i>N. pumilio</i>	Chile	1
	Palfner (2001)	<i>N. pumilio</i>	Chile	1
<i>Thelephora</i>	Di Battista <i>et al.</i> (2002)	<i>Pseudotsuga menziesii</i>	USA	3
	Jones <i>et al.</i> (1997)	<i>Betula papyrifera, Pseudotsuga menziesii</i>	Canada	5

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
<i>Thelephora</i> (cont.)	Massicotte <i>et al.</i> (1999b)	<i>Abies grandis</i> , <i>Lithocarpus densiflora</i> , <i>Pinus ponderosa</i> , <i>Pseudotsuga menziesii</i>	USA	3
<i>T. terrestris</i>	Agerer & Weiss (1989)	<i>Picea abies</i>	Germany	1
	Agerer & Weiss (1990)	<i>P. abies</i>	Germany	1
	Chu-Chou & Grace (1983)	<i>Pseudotsuga menziesii</i>	N. Zealand	1
	Fassi & Fontana (1966)	<i>Pinus strobus</i>	Italy	3
	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
	Ingleby <i>et al.</i> (1990)	<i>Picea sitchensis</i>	UK	1
	Miller <i>et al.</i> (1990)	<i>Alnus rubra</i>	USA	5
	Schramm (1966)	<i>Pinus virginiana</i>	USA	1
	Thomas & Jackson (1979)	<i>Picea sitchensis</i>	UK	3
	Ursic & Peterson (1997)	<i>Pinus strobus</i>	Canada	3
<i>T. terrestris</i> -like	Gillespie, Durall & Hagerman (2000)	<i>Betula papyrifera</i>	Canada	1
<i>Thelephoraceae</i>	Haug <i>et al.</i> (2005)	<i>Guapira</i>	Ecuador	1
	Haug <i>et al.</i> (2005)	<i>Neea</i>	Ecuador	1
	Haug <i>et al.</i> (2005)	<i>Neea</i>	Ecuador	1
	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
	Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1
	Kernaghan (2001)	<i>Abies lasiocarpa</i> , <i>Picea engelmannii</i>	Canada	1
	Kernaghan (2001)	<i>A. lasiocarpa</i> , <i>Salix barrattiana</i>	Canada	1
	Kernaghan (2001)	<i>Picea engelmannii</i> , <i>S. barrattiana</i>	Canada	1
	Selosse <i>et al.</i> (2002)	<i>Carpinus</i>	France	1
	Selosse <i>et al.</i> (2002)	<i>Carpinus</i>	France	1
<i>Tomentella</i>	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1
	Bradbury <i>et al.</i> (1998)	<i>P. contorta</i>	Canada	1
	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Danielson & Pruden (1989)	<i>Picea pungens</i>	Canada	1
	Danielson <i>et al.</i> (1984)	<i>Pinus banksiana</i>	Canada	3
	Dickie <i>et al.</i> (2004)	<i>Helianthemum bicknellii</i>	USA	1
	Jakucs <i>et al.</i> (2004)	<i>Populus alba</i>	Hungary	1
	Jakucs <i>et al.</i> (2005)	<i>P. alba</i>	Hungary	1
	Jakucs <i>et al.</i> (2005)	<i>P. alba</i>	Hungary	1
	Jakucs <i>et al.</i> (2005)	<i>P. alba</i>	Hungary	1
	Jakucs <i>et al.</i> (2005)	<i>Quercus cerris</i>	Hungary	1

	Jakucs <i>et al.</i> (2005)	<i>Q. robur</i>	Hungary	1
	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
	Massicotte <i>et al.</i> (1999b)	<i>Abies grandis</i> , <i>Arbutus menziesii</i> , <i>Lithocarpus densiflora</i> , <i>Pinus ponderosa</i> , <i>Pseudotsuga menziesii</i>	USA	3
<i>T. albomarginata</i>	Hagerman <i>et al.</i> (2001)	<i>P. menziesii</i>	Canada	1
	Agerer (1996a)	<i>Pinus sylvestris</i>	Germany	1
	Agerer (1996k)	<i>P. sylvestris</i>	Germany	1
<i>T. brunneorufa</i>	Agerer & Bougher (2001)	<i>Eucalyptus</i>	Australia	1
<i>T. ferruginea</i>	Raidl & Müller (1996)	<i>Fagus sylvatica</i>	Germany	1
	Raidl (1998b)	<i>F. sylvatica</i>	Germany	1
<i>T. galzinii</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
	Jakucs (2002a)	<i>Populus alba</i>	Hungary	1
<i>T. pilosa</i>	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
<i>T. pilosa</i>	Jakucs & Agerer (1999b)	<i>Populus alba</i>	Hungary	1
	Jakucs (2002a)	<i>P. alba</i>	Hungary	1
	Jakucs (2002h)	<i>P. alba</i>	Hungary	1
<i>T. stuposa</i>	Jakucs <i>et al.</i> (2004)	<i>Picea abies</i>	Germany	1
<i>T. subtestacea</i>	Jakucs & Agerer (2001)	<i>Populus alba</i>	Hungary	1
	Jakucs (2002a)	<i>P. alba</i>	Hungary	1
	Jakucs (2002i)	<i>P. alba</i>	Hungary	1
<i>Tomentella-like</i>	Goodman (1996a)	<i>Pseudotsuga menziesii</i>	Canada	1
<i>Tomentelloid</i>	Jakucs (2002a)	<i>Populus alba</i>	Hungary	1
<i>Tomentellopsis submollis</i>	Agerer (1998e)	<i>Pinus sylvestris</i>	Germany	1
<i>Tricharina gilva</i>	Ingleby <i>et al.</i> (1990)	<i>Picea sitchensis</i>	UK	1
<i>Tricholoma</i>	Godbout & Fortin (1985)	<i>Populus tremuloides</i>	Canada	3
<i>T. acerbum</i>	Agerer & Waller (1993)	<i>Fagus sylvatica</i>	Germany	1
<i>T. albobrunneum</i>	Duñabeitia <i>et al.</i> (1996)	<i>Pinus radiata</i>	Spain	3
	Luppi & Gautero (1967)	<i>Quercus petraea</i>	Italy	1
	Uhl (1988a)	<i>Pinus sylvestris</i>	Germany	1
<i>T. auratum</i>	Comandini <i>et al.</i> (2004)	<i>Abies alba</i>	Italy	1
<i>T. bufonium</i>	Abourouh & Najim (1995)	<i>Cedrus atlantica</i>	Morocco	1
<i>T. caligatum</i>	Uhl (1988a)	<i>Betula pendula</i>	Germany	1
<i>T. flavobrunneum</i>	Danielson (1984b)	<i>Pinus banksiana</i>	Canada	2
<i>T. flavovirens</i>	Yamada <i>et al.</i> (2001)	<i>P. densiflora</i>	Japan	5
	Treu (1990a)	<i>Larix decidua</i>	Germany	1
<i>T. imbricatum</i>	Lefevre & Müller (1998)	<i>Pinus contorta</i>	Germany	1
<i>T. magnivelare</i>	Gill <i>et al.</i> (2000)	<i>P. densiflora</i>	Japan	1
<i>T. matsutake</i>	Danielson (1984b)	<i>P. banksiana</i>	Canada	2
<i>T. pessundatum</i>	Yamada <i>et al.</i> (2001)	<i>P. densiflora</i>	Japan	5
<i>T. portentosum</i>	Yamada <i>et al.</i> (2001)	<i>P. densiflora</i>	Japan	5
<i>T. saponaceum</i>	Cripps (1997b)	<i>Populus tremuloides</i>	USA	1
<i>T. sculpturatum</i>	Brand (1992f)	<i>Fagus sylvatica</i>	Germany	1
<i>T. sciodes</i>	Brand (1991)	<i>F. sylvatica</i>	Germany	1
	Agerer (1987b)	<i>Picea abies</i>	Germany	1
<i>T. sulphureum</i>	Agerer (1987i)	<i>P. abies</i>	Germany	1
	Comandini <i>et al.</i> (2004)	<i>Castanea sativa</i>	Italy	1
<i>T. vaccinum</i>	Agerer (1987b)	<i>Picea abies</i>	Germany	1

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat	
<i>Tricholoma vaccinum</i> (cont.)	Agerer (1987j)	<i>Picea abies</i>	Germany	1	
	Brunner <i>et al.</i> (1992)	<i>P. abies</i>	Switzerland	2	
<i>Tricholomataceae</i>	See <i>et al.</i> (1997)	<i>Shorea leprosula</i>	Malaysia	1	
<i>Truncocolumella citrina</i>	Eberhart & Luoma (1996)	<i>Pseudotsuga menziesii</i>	USA	1	
	Hagerman <i>et al.</i> (2001)	<i>P. menziesii</i>	Canada	1	
	Massicotte <i>et al.</i> (2000)	<i>P. menziesii</i>	Canada	3	
<i>Tsugaerhiza luteoannulata</i>	Agerer & Molina (1997)	<i>Tsuga heterophylla</i>	USA	1	
	Agerer (1998f)	<i>T. heterophylla</i>	Germany	1	
<i>T. tripigmentata</i>	Agerer & Trappe (1996)	<i>T. heterophylla</i>	USA	1	
	Agerer (1998g)	<i>T. heterophylla</i>	Germany	1	
<i>Tuber</i>	Bradbury (1998)	<i>Pinus contorta</i>	Canada	1	
	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1	
	Chu-Chou & Grace (1983)	<i>Pseudotsuga menziesii</i>	N. Zealand	1	
	Danielson & Pruden (1989)	<i>Picea pungens</i>	Canada	1	
	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1	
	Ingleby <i>et al.</i> (1990)	<i>Betula pendula</i>	UK	1	
	Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>Pseudotsuga menziesii</i>	Canada	5	
	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1	
	Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1	
	Torres & Honrubia (1997)	<i>Pinus halepensis</i>	Spain	3	
	Ursic & Peterson (1997)	<i>Pinus strobus</i>	Canada	3	
	<i>T. aestivum</i>	Bencivenga <i>et al.</i> (1992)	<i>Corylus avellana</i> , <i>Quercus pubescens</i>	Italy	4
		Etayo & De Miguel (1998)	<i>C. avellana</i>	Spain	4
		Giraud (1988)	Not specified	France	4
		Granetti (1995)	<i>Corylus avellana</i> , <i>C. colurna</i> , <i>Ostrya carpinifolia</i> , <i>Pinus halepensis</i> , <i>P. nigra</i> , <i>P. pinea</i> , <i>Quercus cerris</i> , <i>Q. ilex</i> , <i>Q. pubescens</i>	Italy	3
		Granetti <i>et al.</i> (1995b)	<i>Corylus avellana</i>	Italy	3
		Granetti <i>et al.</i> (1995b)	<i>C. colurna</i>	Italy	3
		Granetti <i>et al.</i> (1995b)	<i>Pinus laricio</i>	Italy	3
		Granetti <i>et al.</i> (1995b)	<i>P. pinea</i>	Italy	3
		Granetti <i>et al.</i> (1995b)	<i>Quercus cerris</i>	Italy	3
Granetti <i>et al.</i> (1995b)		<i>Q. ilex</i>	Italy	3	
Granetti, Rubini & Angelini (1995b)	<i>Q. pubescens</i>	Italy	3		
Meotto, Nosenzo & Fontana (1995)	<i>Q. robur</i>	Italy	3		
Müller <i>et al.</i> (1996a)	<i>Corylus avellana</i>	France	3		
Palenzona (1969)	<i>C. avellana</i>	Italy	3		
Rauscher <i>et al.</i> (1996b)	<i>C. avellana</i>	France	3		
Sáez & De Miguel (1995)	Not specified	Spain	4		
Zambonelli, Salomoni & Pisi (1993)	<i>Quercus pubescens</i>	Italy	3		
Zambonelli, Salomoni & Pisi (1995)	<i>Pinus pinea</i>	Italy	3		
<i>T. albidum</i>	Bencivenga <i>et al.</i> (1992)	<i>Corylus avellana</i> , <i>Quercus pubescens</i>	Italy	4	
	Etayo & De Miguel (1998)	<i>Q. faginea</i> , <i>Q. ilex</i>	Spain	4	
	Fontana & Centrella (1967)	<i>Corylus avellana</i> , <i>Pinus pinea</i> , <i>Quercus petraea</i>	Italy	1	

	Meotto <i>et al.</i> (1995)	<i>Q. robur</i>	Italy	3
	Sáez & De Miguel (1995)	Not specified	Spain	4
	Scannerini & Palenzona (1967)	<i>Pinus strobus</i>	Italy	3
	Voiry (1981)	<i>Fagus</i>	France	1
<i>T. borechii</i>	Zambonelli <i>et al.</i> (1993)	<i>Quercus pubescens</i>	Italy	3
	Duñabeitia <i>et al.</i> (1996)	<i>Pinus radiata</i>	Spain	3
	Giomaro <i>et al.</i> (2000)	<i>Tilia platyphyllos</i>	Italy	2
	Giraud (1988)	Not specified	France	4
	Granetti & Baciarelli (1997)	<i>Quercus ilex</i>	Italy	4
	Granetti (1995)	<i>Cistus incanus, Corylus avellana, C. colurna, Ostrya carpinifolia, Quercus cerris, Q. pubescens, Pinus pinea, Populus alba, P. nigra, Salix caprea, Tilia platyphyllos</i>	Italy	3
	Granetti, Angelini & Rubini (1995a)	<i>T. platyphyllos</i>	Italy	3
	Rauscher <i>et al.</i> (1996a)	<i>Corylus avellana</i>	France	3
	Rauscher <i>et al.</i> (1996c)	<i>C. avellana</i>	France	3
	Zambonelli <i>et al.</i> (1995)	<i>Pinus pinea</i>	Italy	3
<i>T. brumale</i>	Zambonelli, Iotti & Govi (1998)	<i>P. pinea</i>	Italy	4
	Azul & Freitas (1999)	<i>Quercus suber</i>	Portugal	1
	Chevalier (1973)	<i>Corylus avellana</i>	France	2
	Chevalier (1973)	<i>Pinus halepensis</i>	France	2
	Chevalier (1973)	<i>P. nigra</i>	France	2
	Chevalier (1973)	<i>P. sylvestris</i>	France	2
	De Román & De Miguel (2005)	<i>Quercus ilex</i>	Spain	1
	Etayo & De Miguel (1998)	<i>Corylus avellana, Q. faginea</i>	Spain	4
	Fischer <i>et al.</i> (2004)	<i>Q. ilex</i>	Spain	4
	Fontana & Bonfante-Fasolo (1971)	<i>Pinus nigra</i>	Italy	3
	Giraud (1988)	Not specified	France	4
	Granetti & Baciarelli (1997)	<i>Quercus ilex</i>	Italy	4
	Granetti (1995)	<i>Corylus avellana, Ostrya carpinifolia, Quercus ilex, Q. pubescens</i>	Italy	3
	Meotto <i>et al.</i> (1995)	<i>Q. robur</i>	Italy	3
	Palenzona (1969)	<i>Corylus avellana</i>	Italy	3
	Palenzona, Chevalier & Fontana (1972)	<i>C. avellana, Pinus nigra, Quercus pubescens</i>	Italy	3
	Sáez & De Miguel (1995)	Not specified	Spain	4
	Zambonelli <i>et al.</i> (1993)	<i>Quercus pubescens</i>	Italy	3
<i>T. californicum</i>	Zambonelli <i>et al.</i> (1995)	<i>Pinus pinea</i>	Italy	3
	Massicotte <i>et al.</i> (1999b)	<i>Abies grandis, Lithocarpus densiflora, Pinus ponderosa, Pseudotsuga menziesii</i>	USA	3
<i>T. excavatum</i>	Giraud (1988)	Not specified	France	4
	Pirazzi (1998)	<i>Quercus pubescens</i>	Italy	3
	Sáez & De Miguel (1995)	Not specified	Spain	4
<i>T. himalayense</i>	Comandini & Pacioni (1997)	<i>Quercus pubescens</i>	Italy	3
<i>T. indicum</i>	Comandini & Pacioni (1997)	<i>Q. pubescens</i>	Italy	3
	Zambonelli <i>et al.</i> (1997)	<i>Pinus pinea</i>	Italy	3
	Zambonelli, Tibiletti & Pisi (1997)	<i>Quercus cerris</i>	Italy	3

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat	
<i>Tuber macrosporum</i>	Giovannetti & Fontana (1981)	<i>Betula</i>	Italy	1	
	Granetti (1995)	<i>Quercus cerris</i>	Italy	3	
	Meotto <i>et al.</i> (1995)	<i>Q. robur</i>	Italy	3	
<i>T. maculatum</i>	Zambonelli <i>et al.</i> (1993)	<i>Q. pubescens</i>	Italy	3	
	Fassi & De Vecchi (1962)	<i>Pinus strobus</i>	Italy	3	
	Zambonelli <i>et al.</i> (1999)	<i>Ostrya carpinifolia</i>	Italy	3	
<i>T. magnatum</i>	Angelini & Granetti (1995)	<i>Populus alba</i>	Italy	2	
	Granetti (1995)	<i>Corylus avellana</i> , <i>C. colurna</i> , <i>Ostrya carpinifolia</i> , <i>Quercus cerris</i> , <i>Q. pubescens</i> , <i>Q. robur</i> , <i>Populus alba</i> , <i>P. nigra</i> , <i>Salix alba</i> , <i>S. caprea</i>	Italy	3	
	Granetti <i>et al.</i> (1995a)	<i>Tilia platyphyllos</i>	Italy	3	
	Mello <i>et al.</i> (2001)	<i>Quercus robur</i>	Italy	3	
	Meotto <i>et al.</i> (1995)	<i>Q. robur</i>	Italy	3	
	Palenzona & Fontana (1978)	<i>Q. pubescens</i>	Italy	3	
	Rubini <i>et al.</i> (2001)	<i>Q. cerris</i>	Italy	3	
	Sáez & De Miguel (1995)	Not specified	Spain	4	
	Zambonelli <i>et al.</i> (1993)	<i>Quercus pubescens</i>	Italy	3	
	Águeda <i>et al.</i> (2001)	<i>Q. ilex</i>	Spain	4	
	Bencivenga <i>et al.</i> (1992)	<i>Corylus avellana</i> , <i>Q. pubescens</i>	Italy	4	
	Etayo & De Miguel (1998)	<i>C. avellana</i> , <i>Q. faginea</i> , <i>Q. ilex</i>	Spain	4	
	Giraud (1988)	Not specified	France	4	
	Granetti & Baciarelli (1997)	<i>Quercus ilex</i>	Italy	4	
	Granetti (1995)	<i>Cistus incanus</i> , <i>Corylus avellana</i> , <i>C. colurna</i> , <i>Ostrya carpinifolia</i> , <i>Quercus cerris</i> , <i>Q. ilex</i> , <i>Q. pubescens</i> , <i>Q. robur</i>	Italy	3	
<i>T. melanosporum</i>	Meotto <i>et al.</i> (1995)	<i>Q. robur</i>	Italy	3	
	Palenzona (1969)	<i>Corylus avellana</i>	Italy	3	
	Palenzona <i>et al.</i> (1972)	<i>C. avellana</i> , <i>Pinus sylvestris</i> , <i>Quercus pubescens</i>	Italy	3	
	Rauscher & Chevalier (1995a)	<i>Corylus avellana</i>	France	3	
	Rauscher, Agerer & Chevalier (1995)	<i>C. avellana</i>	France	3	
	Sáez & De Miguel (1995)	Not specified	Spain	4	
	Zambonelli <i>et al.</i> (1993)	<i>Quercus pubescens</i>	Italy	3	
	Zambonelli <i>et al.</i> (1995)	<i>Pinus pinea</i>	Italy	3	
	<i>T. mesentericum</i>	Giraud (1988)	Not specified	France	4
		Granetti (1995)	<i>Corylus avellana</i>	Italy	3
		Meotto <i>et al.</i> (1995)	<i>Ostrya carpinifolia</i>	Italy	3
		Rauscher & Chevalier (1995b)	<i>Corylus avellana</i>	France	3
		Rauscher <i>et al.</i> (1995)	<i>C. avellana</i>	France	3
		Sáez & De Miguel (1995)	Not specified	Spain	4
		Zambonelli <i>et al.</i> (1993)	<i>Quercus pubescens</i>	Italy	3
Zambonelli <i>et al.</i> (1995)		<i>Pinus pinea</i>	Italy	3	
<i>T. oligospermum</i>		Bencivenga, Tanfulli & Donnini (1997)	<i>Quercus cerris</i>	Italy	3

<i>T. panniferum</i>	Pirazzi (1998)	<i>Corylus avellana</i>	Italy	3
<i>T. puberulum</i>	Blaschke (1988)	<i>Picea abies</i>	Germany	1
<i>T. rapaeodorum</i>	Jakucs (2002a)	<i>Populus alba</i>	Hungary	1
<i>T. rufum</i>	Giraud (1988)	Not specified	France	4
	Palenzona <i>et al.</i> (1972)	<i>Abies alba</i> , <i>Carpinus betulus</i> , <i>Corylus avellana</i> , <i>Fagus sylvatica</i> , <i>Pinus halepensis</i> , <i>P. nigra</i> , <i>P. strobus</i> , <i>P. sylvestris</i> , <i>Quercus pubescens</i> , <i>Tilia platyphyllos</i>	Italy	3
	Pirazzi (1998)	<i>Q. pubescens</i>	Italy	3
	Rauscher & Chevalier (1995c)	<i>Corylus avellana</i>	France	3
	Rauscher <i>et al.</i> (1995)	<i>C. avellana</i>	France	3
	Sáez & De Miguel (1995)	Not specified	Spain	4
<i>T. uncinatum</i>	Müller <i>et al.</i> (1996b)	<i>Corylus avellana</i>	France	3
<i>Tuberaceae</i>	See <i>et al.</i> (1997)	<i>Shorea leprosula</i>	Malaysia	1
<i>Tubulicrinis</i>	Kernaghan (2001)	<i>Picea engelmannii</i>	Canada	1
<i>Tylophilus felleus</i>	Uhl (1989)	<i>Pinus sylvestris</i>	Germany	1
<i>Tylospora asterophora</i>	Eberhardt, Walter & Kottke (1999)	<i>Picea abies</i>	Germany	1
<i>T. fibrillosa</i>	Eberhardt <i>et al.</i> (1999)	<i>P. abies</i>	Germany	1
	Taylor & Alexander (1991)	<i>P. sitchensis</i>	UK	1
Unidentified	Abourouh & Najim (1995)	<i>Cedrus atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Abourouh & Najim (1995)	<i>C. atlantica</i>	Morocco	1
	Águeda <i>et al.</i> (2001)	<i>Quercus ilex</i>	Spain	4
	Águeda <i>et al.</i> (2001)	<i>Q. ilex</i>	Spain	4
	Águeda <i>et al.</i> (2001)	<i>Q. ilex</i>	Spain	4
	Águeda <i>et al.</i> (2001)	<i>Q. ilex</i>	Spain	4
	Águeda <i>et al.</i> (2001)	<i>Q. ilex</i>	Spain	4
	Águeda <i>et al.</i> (2001)	<i>Q. ilex</i>	Spain	4
	Azul & Freitas (1999)	<i>Q. suber</i>	Portugal	1
	Azul & Freitas (1999)	<i>Q. suber</i>	Portugal	1
	Baxter <i>et al.</i> (1999)	<i>Quercus</i>	USA	1
	Bencivenga <i>et al.</i> (1992)	<i>Corylus avellana</i> , <i>Quercus pubescens</i>	Italy	4
	Bencivenga <i>et al.</i> (1992)	<i>C. avellana</i> , <i>Q. pubescens</i>	Italy	4
	Bencivenga <i>et al.</i> (1992)	<i>C. avellana</i> , <i>Q. pubescens</i>	Italy	4
	Bencivenga <i>et al.</i> (1995)	Not specified	Italy	3
	Bencivenga <i>et al.</i> (1995)	Not specified	Italy	3
	Buée <i>et al.</i> (2004)	<i>Fagus sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1
	Buée <i>et al.</i> (2004)	<i>F. sylvatica</i>	France	1

Fontana (1961)	<i>Populus</i>	Italy	1
Fontana (1961)	<i>Populus</i>	Italy	1
Fontana (1961)	<i>Populus</i>	Italy	1
Fontana (1961)	<i>Populus</i>	Italy	1
Goodman (1996b)	<i>Pseudotsuga menziesii</i>	Canada	1
Goodman (1996c)	<i>P. menziesii</i>	Canada	1
Goodman (1996d)	<i>P. menziesii</i>	Canada	1
Goodman (1996f)	<i>P. menziesii</i>	Canada	1
Goodman (1997a)	<i>Tsuga heterophylla</i>	Canada	1
Goodman (1997c)	<i>T. heterophylla</i>	Canada	1
Granetti & Angelini (1992)	<i>Corylus avellana</i> , <i>Ostrya carpinifolia</i> , <i>Quercus ilex</i> , <i>Q. pubescens</i>	Italy	4
Granetti & Angelini (1992)	<i>Ostrya carpinifolia</i>	Italy	4
Granetti & Baciarelli (1997)	<i>Quercus ilex</i>	Italy	4
Granetti & Baciarelli (1997)	<i>Q. ilex</i>	Italy	4
Granetti & Baciarelli (1997)	<i>Q. ilex</i>	Italy	4
Granetti & Baciarelli (1997)	<i>Q. ilex</i>	Italy	4
Granetti & Baciarelli (1997)	<i>Q. ilex</i>	Italy	4
Hagerman <i>et al.</i> (2001)	<i>Pseudotsuga menziesii</i>	Canada	1
Ingleby <i>et al.</i> (1990)	<i>Picea sitchensis</i>	UK	1
Ingleby <i>et al.</i> (1990)	<i>P. sitchensis</i>	UK	1
Ingleby <i>et al.</i> (1990)	<i>P. sitchensis</i>	UK	1
Ingleby <i>et al.</i> (1990)	<i>P. sitchensis</i>	UK	1
Jones <i>et al.</i> (1997)	<i>Betula papyrifera</i> , <i>Pseudotsuga menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>Pseudotsuga menziesii</i>	Canada	5
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	5
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	5
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>B. papyrifera</i> , <i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>P. menziesii</i>	Canada	5
Jones <i>et al.</i> (1997)	<i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>P. menziesii</i>	Canada	1
Jones <i>et al.</i> (1997)	<i>P. menziesii</i>	Canada	1
Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1
Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1
Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1
Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1
Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1
Kaldorf (2004)	<i>P. tremula</i> × <i>P. tremuloides</i>	Germany	1

Table 1. (Cont.)

Ectomycorrhiza	Reference	Host tree	Country	Habitat
Unidentified (cont.)	Kaldorf (2004)	<i>Populus tremula</i> × <i>P. tremuloides</i>	Germany	1
	Massicotte <i>et al.</i> (1999b)	<i>Abies grandis</i> , <i>Lithocarpus densiflora</i> ,	USA	3
		<i>Pseudotsuga menziesii</i>		
	Miller <i>et al.</i> (1990)	<i>Alnus rubra</i>	USA	5
	Miller <i>et al.</i> (1990)	<i>A. rubra</i>	USA	5
	Miller <i>et al.</i> (1990)	<i>A. rubra</i>	USA	5
	Miller <i>et al.</i> (1990)	<i>A. rubra</i>	USA	5
	Moser <i>et al.</i> (2005)	<i>Quercus garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Moser <i>et al.</i> (2005)	<i>Q. garryana</i>	USA	1
	Thomas & Jackson (1979)	<i>Picea sitchensis</i>	UK	3
	Thomas & Jackson (1979)	<i>P. sitchensis</i>	UK	3
	Thomas & Jackson (1979)	<i>P. sitchensis</i>	UK	3
	Thomas & Jackson (1979)	<i>P. sitchensis</i>	UK	3
	Thomas & Jackson (1979)	<i>P. sitchensis</i>	UK	3
	Torres & Honrubia (1997)	<i>Pinus halepensis</i>	Spain	3
	Treu (1990a)	<i>Larix decidua</i>	Germany	1
	Trost <i>et al.</i> (1999)	<i>Picea abies</i>	Slovenia	1
Trost <i>et al.</i> (1999)	<i>P. abies</i>	Slovenia	1	

	Trost <i>et al.</i> (1999)	<i>P. abies</i>	Slovenia	1
	Trost <i>et al.</i> (1999)	<i>P. abies</i>	Slovenia	1
	Trost <i>et al.</i> (1999)	<i>P. abies</i>	Slovenia	1
	Trost <i>et al.</i> (1999)	<i>P. abies</i>	Slovenia	1
	Trost <i>et al.</i> (1999)	<i>P. abies</i>	Slovenia	1
	Ursic & Peterson (1997)	<i>Pinus strobus</i>	Canada	3
	Voiry (1981)	<i>Fagus</i>	France	1
	Voiry (1981)	<i>Fagus</i>	France	1
	Voiry (1981)	<i>Fagus</i>	France	1
	Voiry (1981)	<i>Fagus</i>	France	1
	Voiry (1981)	<i>Fagus</i>	France	1
	Wöllecke (2001)	<i>Pinus sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Wöllecke (2001)	<i>P. sylvestris</i>	Germany	1
	Zambonelli <i>et al.</i> (1998)	<i>P. pinea</i>	Italy	4
	Zambonelli <i>et al.</i> (1998)	<i>P. pinea</i>	Italy	4
	Zambonelli <i>et al.</i> (1998)	<i>P. pinea</i>	Italy	4
	Zambonelli <i>et al.</i> (1998)	<i>P. pinea</i>	Italy	4
	Zambonelli <i>et al.</i> (1998)	<i>P. pinea</i>	Italy	4
	Torres & Honrubia (1997)	<i>P. halepensis</i>	Spain	3
<i>Xerocomus</i>	Jakucs (2002a)	<i>Populus alba</i>	Hungary	1
<i>X. armeniacus</i>	Agerer & Gronbach (1990b)	<i>Picea abies</i>	Germany	1
<i>X. badius</i>	Duñabeitia <i>et al.</i> (1996)	<i>Pinus radiata</i>	Spain	3
	Gronbach (1988)	<i>Picea abies</i>	Germany	1
	Wöllecke (2001)	<i>Pinus sylvestris</i>	Germany	1
<i>X. chrysenteron</i>	Azul & Freitas (1999)	<i>Quercus suber</i>	Portugal	1
	Brand (1989a)	<i>Fagus sylvatica</i>	Germany	1
	Brand (1989b)	<i>F. sylvatica</i>	Germany	1
<i>X. lanatus</i>	Jakucs & Beenken (2001)	<i>Quercus cerris</i>	Hungary	1
	Jakucs (2002j)	<i>Q. cerris</i>	Hungary	1
<i>X. subtomentosus</i>	Palfner (1995b)	<i>Q. robur</i>	Germany	1

Numerous descriptions of ECM have also been published in different journals following any of the systems mentioned above, but the information on the topic is typically difficult to approach due to the varied nature of the sources. Therefore, we considered it necessary to gather and review these published sources in order to build a database of the descriptions of ECM published so far useful to all mycorrhizologists. We have focused exclusively on morphological descriptions of ECM. It is outside the scope of this work to refer to other types of mycorrhizas (e.g. ectendomycorrhizas, ericoid, or arbutoid mycorrhizas) or to ECM morphotypes cited in papers dealing with molecular techniques which do not provide a morphological description. Although this revision is very extensive, some sources could not be accessed, and there may be other descriptions hidden as grey literature or in journals with little circulation. Contributions by other authors are thus expected and welcome in order to enrich the database.

MATERIALS AND METHODS

Each published source containing a description of an ECM, no matter how brief the description, was reviewed to record the following details: (1) fungus forming the ECM; (2) host tree; (3) country where the material for description was collected; and (4) habitat of the ECM, i.e. whether the ECM was collected from the field, a nursery, a truffle growing stand, or if it was synthesized *in vitro*. Only published sources were reviewed, i.e. ECM descriptions contained in theses, reports, or other kinds of unpublished material were not considered. ECM from nurseries included artificially inoculated or naturally occurring in the nursery. When an ECM morphotype was collected in more than one habitat, the term 'various' was applied. For simplicity, subspecies and varieties of fungi and host trees were not considered. In some cases, several host tree species were reported to be associated with the same ECM morphotype in the same description, but no morphological or anatomical distinction was made between ECM tips from the different tree species. In these cases, all host tree species were cited in Table 1 within the same entry. The term 'not specified' was used when several host tree species were mentioned in a paper, but there was no specific information about the tree species actually associated with each ECM described.

Other secondary data were also recorded: the division, order, sporocarp morphology and sporocarp development (epigeous or hypogeous) of the fungus forming the ECM; whether the description was detailed (Agerer 1986a, 1987–2002, 1994a, 1999a); and whether drawings and photos were also available together with the description. The categories used for fruit body morphology were: gasteroid, mushroom (both agaricoid and boletoid), truffle (any hypogeous fungus, including *Ascomycota* and *Basidiomycota*), and other morphology (apothecial, perithecial, clavarioid,

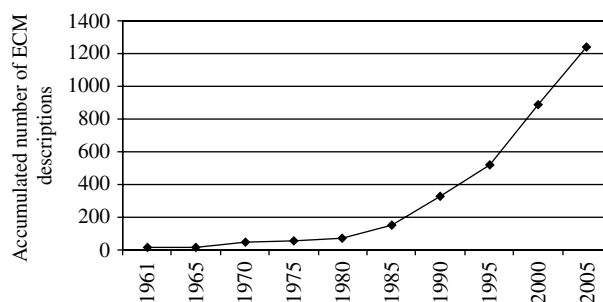


Fig. 1. Accumulated number of ECM descriptions published since 1961.

ramarioid or resupinate). Although some comments are made in this review regarding these secondary data, the data are not included in full due to space constraints, but the corresponding author will provide them if contacted.

RESULTS AND DISCUSSION

In all 1244 descriptions of ECM published in 479 papers were reviewed (Table 1). The number of different ECM morphotypes described was 814, with each ECM not identified to species level considered a different ECM. 345 ECM morphotypes were identified to species, 132 to genus, 21 to family, five to order, and 20 to division; four had another level of identification (cortinarioid, pezizalean, sebacinoid, and tomentelloid, respectively), 99 were unidentified ECM morphotypes published under a binomial name (Agerer 1986a, 1987–2002, 1994a, 1999a) or other name widely used in the literature (morphotypes AD and SB; Giraud 1988), and 188 were unidentified ECM morphotypes lacking a name. Only 330 of the 1244 descriptions reviewed were detailed (Agerer 1986a, 1987–2002, 1994a, 1999a); 379 descriptions included drawings and 771 provided photographs.

The descriptions reviewed date back to 1961, and include all papers published until May 2005, when the revision of this article was submitted. Fig. 1 shows the accumulated number of ECM descriptions published over the years, and it is important to note the sharp increase in publications from 1985 onwards, when Agerer (1986a) started to develop the more defined system.

Most of the ECM described were collected in Europe, with 862 descriptions recorded as follows: Austria, 2; Belgium, 1; Estonia, 3; France, 83; Germany, 331; Hungary, 46; Italy, 177; Poland, 28; Portugal, 14; Slovenia, 15; Spain, 93; Sweden, 2; Switzerland, 14; UK, 53. A significant number, 271 ECM, were collected in North America (Canada, 175; USA, 96). All other continents remain poorly represented: 37 ECM were collected in South America (Argentina, 3; Chile, 28; Ecuador, 6), 21 in Africa (Cameroon, 7; Morocco, 14), 37 in Asia (India, 2; Indonesia, 1; Japan, 14;

Malaysia, 10; Taiwan, 10) and 16 in Oceania (Australia, 2; New Zealand, 14). It is interesting to note that most descriptions came from Germany, Italy, and Canada. The material collected in Germany was usually described in detail following the system developed by Agerer (1986a, 1987–2002, 1994a, 1999a), and is the most extensive source of information on morphology and anatomy of ECM. In contrast, the ECM described in Canada were usually collected in ecological studies of ectomycorrhizal communities, and the descriptions provided were typically short, with the exception of those published by Goodman *et al.* (1996–2000). In Italy, research on ECM is often linked to the interest in cultivating truffles, and most ECM described were either *Tuber* species of commercial interest or competitive fungi that threaten truffle production.

Gymnosperms were the most common tree associates, recorded in 510 descriptions (*Abies*, 15; *Cedrus*, 14; *Gnetum*, 1; *Larix*, 20; *Picea*, 162; *Pinus*, 226; *Pseudotsuga*, 59; *Tsuga*, 13). Genera in the *Fagaceae* were also well represented, with 339 descriptions (*Castanea*, 3; *Castanopsis*, 1; *Cyclobalanopsis*, 1; *Fagus*, 116; *Nothofagus*, 29; *Pasania*, 1; *Quercus*, 188). Other families recorded as hosts were: *Betulaceae*, 131 (*Alnus*, 50; *Betula*, 48; *Carpinus*, 4; *Corylus*, 26; *Ostrya*, 3); *Salicaceae*, 94 (*Populus*, 87; *Salix*, 7); *Cistaceae*, 18 (*Cistus*, 3; *Fumana*, 4; *Helianthemum*, 11); *Myrtaceae*, 7 (*Eucalyptus*, 5; *Kunzea*, 1; *Leptospermum*, 1); *Leguminosae*, 7 (*Acacia*, 1; *Tetraberlinia*, 6); *Nyctaginaceae*, 6 (*Guapira*, 1; *Neea*, 5); *Dipterocarpaceae*, 11 (*Shorea*); *Rosaceae*, 1 (*Dryas*); *Tiliaceae*, 6 (*Tilia*). The remaining 113 ECM were associated with either ‘not specified’ host trees (35), or with more than one host tree species, within the same description (78). If the ECM description applied to more than one host tree species, the records were not considered individually for the count to avoid an artificial increase in the total number of descriptions. A careful analysis of the host species involved in the ECM described revealed that boreal and temperate forests are the best-known ecosystems so far, whereas there is little information on ECM communities of tropical and Mediterranean ecosystems.

Most ECM were collected from the field (899), 159 in a nursery, 81 in a truffle growing stand. Sixty five descriptions were based in ECM material synthesized *in vitro*, and in 40 descriptions, the material was collected in more than one habitat (indicated by the term ‘various’). Many ECM morphotypes collected from the field could not be identified, whereas the aim of inoculating ECM fungi in nurseries or synthesizing them *in vitro* was precisely to know the identity of the fungal symbiont beforehand. Fungi recorded in truffle growing stands were typically truffle species or their competitors.

The associated fungi recorded in the 1244 ECM descriptions reviewed were mostly *Basidiomycota* (707), 200 were *Ascomycota*, and in 337 descriptions the

fungal division could not be ascertained. As most *Ascomycota* ECM were *Tuber* species, it is clear that there is a lack of knowledge on the ECM of this fungal division. Fungal orders were represented in ECM descriptions as follows: *Agaricales*, 220; *Boletales*, 166; *Cantharellales*, 13; *Elaphomycetales*, 5; *Hymenochaetales*, 1; *Pezizales*, 150; *Phallales*, 18; *Polyporales*, 41; *Russulales*, 148; *Thelephorales*, 77; *Tremellales*, 5; unidentified order, 400.

The majority of fungal species cited were epigeous (638), with only 198 descriptions belonging to hypogeous fungi. The type of fruit body development of the fungal symbiont was unknown in the remaining 408 descriptions. These data show that, with the exception of *Tuber* species again, the ECM of hypogeous fungi are poorly known. The fact that fruit bodies of hypogeous fungi are typically difficult to find is definitely related to the scarce interest researchers have hitherto shown for ECM formed by these species.

The fruit body morphology of the associated fungus was mushroom-like in 460 ECM descriptions, gasteroid in 35, truffle-like in 198, had other morphologies in 142, and could not be assigned to any morphology in 409 descriptions. These data indicated that fungi which lack the usual ‘mushroom’ morphology or which have inconspicuous fruit bodies have been traditionally overlooked in ECM community studies (Gardes & Bruns 1996, Dahlberg, Jonsson & Nylund 1997, Stendell, Horton & Bruns 1999, Taylor & Bruns 1999, Peter *et al.* 2001).

The amount of research carried out so far on description and identification of fungi involved in ECM communities is outstanding. Nevertheless, this review reveals that many gaps in knowledge remain to be filled, and mycorrhizologists should focus on little-known geographic areas, ecosystems, host trees and fungal groups in future studies in order to face the challenges the ECM community poses.

ACKNOWLEDGMENTS

We are grateful to Steve Woodward and two anonymous referees for their useful comments on the manuscript. This revision was carried out over many years, and there are several funding bodies we wish to thank for their financial support: the Spanish Instituto Nacional de Investigaciones Agrarias y Alimentarias for a PhD grant for M. de R.; Gobierno de Navarra and Fundación Universitaria de Navarra for funding three research projects; and the Spanish Ministerio de Educación y Ciencia for a post-doctoral grant for M. de R.

REFERENCES

- Abourouh, M. & Najim, L. (1995) Les différents types d'ectomycorhizes naturelles de *Cedrus atlantica* Manetti au Maroc. *Cryptogamic Botany* **5**: 332–340.
- Agerer, R. (1986a) Studies on ectomycorrhizae II. Introducing remarks on characterization and identification. *Mycotaxon* **26**: 473–492.

- Agerer, R. (1986b) Studies on ectomycorrhizae III. Mycorrhizae formed by four fungi in the genera *Lactarius* and *Russula* on spruce. *Mycotaxon* **27**: 1–59.
- Agerer, R. (1987–2002) *Colour Atlas of Ectomycorrhizae*. Einhorn-Verlag, Munich.
- Agerer, R. (1987a) Studies on ectomycorrhizae V. Mycorrhizae formed by *Dermocybe cinnamomea* and *D. sanguinea* on spruce. *Nova Hedwigia* **44**: 69–89.
- Agerer, R. (1987b) Studies on ectomycorrhizae IX. Mycorrhizae formed by *Tricholoma sulphureum* and *T. vaccinum* on spruce. *Mycotaxon* **28**: 327–360.
- Agerer, R. (1987c) Studies on ectomycorrhizae X. Mycorrhizae formed by *Cortinarius obtusus* and *C. venetus* on spruce. *Mycologia* **79**: 524–539.
- Agerer, R. (1987d) *Dermocybe sanguinea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 8. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1987e) *Lactarius deterrimus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 3. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1987f) *Lactarius picinus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 4. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1987g) *Russula ochroleuca*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 1. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1987h) *Russula xerampelina*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 2. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1987i) *Tricholoma sulphureum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 9. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1987j) *Tricholoma vaccinum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 10. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1988a) *Cortinarius venetus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 13. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1988b) Studies on ectomycorrhizae XIV. Mycorrhizae formed by *Cortinarius hercynicus* and *C. variegatus* on *Picea abies*. *Canadian Journal of Botany* **66**: 2068–2078.
- Agerer, R. (1989) *Cortinarius variegatus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 24. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1990a) Studies on ectomycorrhizae XXIV. Ectomycorrhizae of *Chroogomphus helveticus* and *C. rutilus* (*Gomphidiaceae*, *Basidiomycetes*) and their relationship to those of *Suillus* and *Rhizopogon*. *Nova Hedwigia* **50**: 1–63.
- Agerer, R. (1990b) *Chroogomphus helveticus* ssp. *tatrensis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 37. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1990c) *Cortinarius hercynicus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 38. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1991a) Studies on ectomycorrhizae XXXIV. Mycorrhizae of *Gomphidius glutinosus* and of *G. roseus* with some remarks on *Gomphidiaceae* (*Basidiomycetes*). *Nova Hedwigia* **53**: 127–170.
- Agerer, R. (1991b) *Gomphidius glutinosus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 58. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1991c) *Sarcodon imbricatus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 66. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1992a) Studies on ectomycorrhizae XLIV. Ectomycorrhizae of *Boletopsis leucomelaena* (*Thelephoraceae*, *Basidiomycetes*) and their relationship to an unidentified ectomycorrhiza. *Nova Hedwigia* **55**: 501–518.
- Agerer, R. (1992b) *Gomphidius roseus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 71. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1993a) *Boletopsis leucomelaena*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 75. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1993b) *Hydnellum peckii*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 77. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1993c) *Phellodon niger*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 78. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1993d) Ectomycorrhizae of *Hydnellum peckii* on Norway spruce and their chlamydospores. *Mycologia* **8** (1): 74–83.
- Agerer, R. (1994a) *Characterization of ectomycorrhiza*. In *Techniques for Mycorrhizal Research*, (J. R. Norris, D. Read & A. K. Varma eds): 25–73. Academic Press, London.
- Agerer, R. (1994b) *Pseudotomentella tristis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 84. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1996a) Ectomycorrhizae of *Tomentella albomarginata* (*Thelephoraceae*) on Scots pine. *Mycorrhiza* **6**: 1–7.
- Agerer, R. (1996b) *Albatrellus ovinus* (Schaeff.: Fr.) Kotl. & Pouz. + *Picea abies* (L) Karst. *Descriptions of Ectomycorrhizae* **1**: 23–28.
- Agerer, R. (1996c) *Ramaria aurea* (Schaeff.: Fr.) Quél. + *Fagus sylvatica* L. *Descriptions of Ectomycorrhizae* **1**: 107–112.
- Agerer, R. (1996d) *Ramaria largentii* Marr & D.E. Stuntz + *Picea abies* (L.) H. Karst. *Descriptions of Ectomycorrhizae* **1**: 113–118.
- Agerer, R. (1996e) *Ramaria spinulosa* (Fr.) Quél. + *Fagus sylvatica* L. *Descriptions of Ectomycorrhizae* **1**: 119–124.
- Agerer, R. (1996f) *Ramaria subbotrytis* (Coker) Corner + *Quercus robur* L. *Descriptions of Ectomycorrhizae* **1**: 125–130.
- Agerer, R. (1996g) *Albatrellus ovinus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 91. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1996h) *Ramaria largentii*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 103. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1996i) *Rhizopogon subcaerulescens*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 104. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1996j) *Russula acrifolia*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 105. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1996k) *Tomentella albomarginata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 111. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1997) *Entoloma sinuatum* (Bull.: Fr.) Kummer + *Salix* spec. *Descriptions of Ectomycorrhizae* **2**: 13–18.
- Agerer, R. (1998a) *Entoloma sinuatum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 117. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1998b) *Geastrum fimbriatum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 119. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1998c) *Lyophyllum decastes*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 124. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1998d) *Ramaria subbotrytis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 134. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1998e) *Tomentellopsis submollis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 138. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1998f) *Tsugaerhiza luteoannulata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 139. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1998g) *Tsugaerhiza tripigmentata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 140. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (1999a) Anatomical characteristics of identified ectomycorrhizas: an attempt towards a natural classification. In: *Mycorrhiza: structure, function, molecular biology and biotechnology* (A. Varma & B. Hock, eds): 633–682. 2nd edn. Springer-Verlag, Berlin.

- Agerer, R. (1999b) *Rozites caperatus* (Pers.: Fr.) Karst. + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **4**: 109–113.
- Agerer, R. (1999c) *Elaphomyces aculeatus* Tul. + *Quercus robur* L. *Descriptions of Ectomycorrhizae* **4**: 37–41.
- Agerer, R. (1999d) *Gyroporus cyanescens* (Bull.: Fr.) Quéf. + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **4**: 43–47.
- Agerer, R. (2002a) *Elaphomyces aculeatus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 158. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (2002b) *Gomphus clavatus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 155. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (2002c) *Gyroporus cyanescens*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 156. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (2002d) *Rozites caperatus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 157. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. (2002e) The ectomycorrhiza *Piceirhiza internicrassihyphis*: a weak competitor of *Cortinarius obtusus*? *Mycological Progress* **1**: 291–299.
- Agerer, R. & Ammirati, J. (1998) *Polyporoletus sublividus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 130. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Beenken, L. (1998a) *Geastrum fimbriatum* Fr. + *Fagus sylvatica* L. *Descriptions of Ectomycorrhizae* **3**: 13–18.
- Agerer, R. & Beenken, L. (1998b) *Lyophyllum decastes* (Fr.) Sing. + *Quercus robur* L. *Descriptions of Ectomycorrhizae* **3**: 43–47.
- Agerer, R. & Bougher, N. L. (2001) *Tomentella brunneorufa* M. J. Larsen + *Eucalyptus* spec. *Descriptions of Ectomycorrhizae* **5**: 205–212.
- Agerer, R. & Gronbach, E. (1987) *Dermocybe cinnamomea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 7. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Gronbach, E. (1988) *Cenococcum geophilum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 11. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Gronbach, E. (1989) *Paxillus involutus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 27. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Gronbach, E. (1990a) *Boletus edulis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 36. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Gronbach, E. (1990b) *Xerocomus badius*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 49. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Molina, R. (1997) '*Tsugaerhiza luteoannulata*' + *Tsuga heterophylla* (Rafin.) Sarg. *Descriptions of Ectomycorrhizae* **2**: 79–84.
- Agerer, R. & Otto, P. (1997) *Bankera fuligineo-alba* (J. C. Schmidt: Fr.) Pouzar + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **2**: 1–6.
- Agerer, R. & Otto, P. (1998) *Bankera fuligineo-alba*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 115. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Rambold, G. (1998) *DEEMY*, a DELTA-based system for characterization and Determination of EctoMYcorrhizae. Version 1.1.
- Agerer, R. & Trappe, J. (1996) '*Tsugaerhiza tripigmentata*' + *Tsuga heterophylla* (Rafin.) Sarg. *Descriptions of Ectomycorrhizae* **2**: 85–89.
- Agerer, R. & Treu, R. (1993) *Gyrodon lividus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 76. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Uhl, M. (1989) *Dermocybe semisanguinea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 25. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Waller, K. (1993) *Tricholoma acerbum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 82. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R. & Weiss, M. (1989) Studies on ectomycorrhizae. XX. Mycorrhizae formed by *Thelephora terrestris* on Norway spruce. *Mycologia* **81**: 444–453.
- Agerer, R. & Weiss, M. (1990) *Thelephora terrestris*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 48. Einhorn Verlag, Schwäbisch Gmünd.
- Agerer, R., Beenken, L. & Ammirati, J. (1998b) *Polyporoletus sublividus* Snell. + *Abies amabilis* Forb. *Descriptions of Ectomycorrhizae* **3**: 85–91.
- Agerer, R., Beenken, L. & Bougher, N. L. (2001) *Descomyces albus* (Klotzsch) Bougher & Castellano + *Eucalyptus* spec. *Descriptions of Ectomycorrhizae* **5**: 41–47.
- Agerer, R., Beenken, L. & Christan, J. (1998a) *Gomphus clavatus* (Pers.: Fr.) S. F. Gray + *Picea abies* (L.) Karst. *Descriptions of Ectomycorrhizae* **3**: 25–29.
- Agerer, R., Klostermeyer, D., Steglich, W., Franz, F. & Acker, G. (1996a) Ectomycorrhizae of *Albatrellus ovinus* (*Scutigeraeae*) on Norway spruce with some remarks on the systematic position of the family. *Mycotaxon* **56**: 289–307.
- Agerer, R., Kraigher, H. & Javornik, B. (1996b) Identification of ectomycorrhizae of *Hydnum rufescens* on Norway spruce and the variability of the ITS region of *Hydnum rufescens* and *H. repandum* (*Basidiomycetes*). *Nova Hedwigia* **63**: 183–194.
- Agerer, R., Müller, W. R. & Bahnweg, G. (1996c) Ectomycorrhizae of *Rhizopogon subcaerulescens* on *Tsuga heterophylla*. *Nova Hedwigia* **63**: 397–415.
- Águeda, B., Fernández, M. & De Miguel, A. M. (2001) Ectomicorizas presentes en la plantación trufera 'Los Quejigares' (Soria). *Libro de Actas del III Congreso Forestal Español, Granada 2001* **1**: 100–106.
- Al Sayegh-Petkovsek, S. & Kraigher, H. (1999) Black types of ectomycorrhizae on six-month old Norway spruce seedlings. *Phyton* **39** (3): 213–217.
- Al Sayegh-Petkovsek, S. & Kraigher, H. (2000) Types of ectomycorrhizae from Kocevka Reka. *Phyton* **40** (6): 37–42.
- Amicucci, A., Zambonelli, A., Guidi, C. & Stocchi, V. (2001) Morphological and molecular characterisation of *Pulvinulla constellatio* ectomycorrhizae. *FEMS Microbiology Letters* **194**: 121–125.
- Angelini, P. & Granetti, B. (1995) La micorrizzazione di alcuni cloni micropropagati di *Populus alba* L. con *Tuber magnatum* Pico. *Giornale Botanico Italiano* **129**: 1161–1177.
- Azul, A. M. & Freitas, H. (1999) Mycorrhizal fungi and their application to forestation programmes with cork oak (*Quercus suber* L.). In *Micorrización en Áreas Mediterráneas de la Península Ibérica*. 75–82. Junta de Extremadura, Badajoz.
- Azul, A. M., Agerer, R. & Freitas, H. (1999) '*Quercirhiza nodulosomorpha*' + *Quercus suber* L. *Descriptions of Ectomycorrhizae* **4**: 103–108.
- Azul, A. M., Agerer, R. & Freitas, H. (2001a) '*Quercirhiza ectendotrophica*' + *Quercus suber* L. *Descriptions of Ectomycorrhizae* **5**: 67–72.
- Azul, A. M., Agerer, R. & Freitas, H. (2001b) '*Quercirhiza internangularis*' + *Quercus suber* L. *Descriptions of Ectomycorrhizae* **5**: 79–83.
- Azul, A. M., Agerer, R. & Freitas, H. (2001c) '*Quercirhiza pedicæae*' + *Quercus suber* L. *Descriptions of Ectomycorrhizae* **5**: 85–91.
- Azul, A. M., Agerer, R. & Freitas, H. (2001d) '*Quercirhiza russulocystidiata*' + *Quercus suber* L. *Descriptions of Ectomycorrhizae* **5**: 93–98.
- Azul, A. M., Agerer, R. & Freitas, H. (2001e) '*Quercirhiza sclerotigera*' + *Quercus suber* L. *Descriptions of Ectomycorrhizae* **5**: 99–105.
- Baxter, J. W., Pickett, S. T. A., Carreiro, M. M. & Dighton, J. (1999) Ectomycorrhizal diversity and community structure in oak forest stands exposed to contrasting anthropogenic impacts. *Canadian Journal of Botany* **77**: 771–782.
- Becerra, A., Daniele, G., Domínguez, L., Nouhra, E. & Horton, T. (2002) Ectomycorrhizae between *Alnus acuminata* H.B.K. and

- Naucoria escharoides* (Fr.: Fr.) Kummer from Argentina. *Mycorrhiza* **12**: 61–66.
- Becerra, A., Nouhra, E., Daniele, G., Dominguez, L. & McKay, D. (2005) Ectomycorrhizas of *Cortinarius helodes* and *Gyrodont monticola* with *Alnus acuminata* from Argentina. *Mycorrhiza* **15**: 7–15.
- Beenken, L. (1996a) *Inocybe appendiculata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 94. Einhorn Verlag, Schwäbisch Gmünd.
- Beenken, L. (1996b) *Inocybe fuscomarginata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 95. Einhorn Verlag, Schwäbisch Gmünd.
- Beenken, L. (1996c) *Inocybe obscuroides*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 96. Einhorn Verlag, Schwäbisch Gmünd.
- Beenken, L. (1996d) *Inocybe terrigena*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 97. Einhorn Verlag, Schwäbisch Gmünd.
- Beenken, L. (2001a) *Russula aeruginea* Lindbl. ex Fr. + *Betula pendula* Roth. *Descriptions of Ectomycorrhizae* **5**: 107–113.
- Beenken, L. (2001b) *Russula alnetorum* Romagn. + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **5**: 115–123.
- Beenken, L. (2001c) *Russula atroglaucula* Einhellinger + *Betula pubescens* Ehrh. *Descriptions of Ectomycorrhizae* **5**: 125–130.
- Beenken, L. (2001d) *Russula cyanoxantha* (Schaeff.) Fr. + *Fagus sylvatica* L. *Descriptions of Ectomycorrhizae* **5**: 131–137.
- Beenken, L. (2001e) *Russula delicata* Fr. + *Tilia* sp. *Descriptions of Ectomycorrhizae* **5**: 139–145.
- Beenken, L. (2001f) *Russula densifolia* Secr. ex Gill. + *Fagus sylvatica* L. *Descriptions of Ectomycorrhizae* **5**: 147–155.
- Beenken, L. (2001g) *Russula densifolia* Secr. ex Gill. + *Picea abies* (L.) H. Karst. *Descriptions of Ectomycorrhizae* **5**: 157–161.
- Beenken, L. (2001h) *Russula foetens* (Pers.: Fr.) Fr. + *Fagus sylvatica* L. *Descriptions of Ectomycorrhizae* **5**: 163–168.
- Beenken, L. (2001i) *Russula medullata* Romagn. + *Populus tremula* L. *Descriptions of Ectomycorrhizae* **5**: 169–174.
- Beenken, L. (2001j) *Russula nothofaginea* Sing. + *Nothofagus dombeyi* (Mirbel) Oersted. *Descriptions of Ectomycorrhizae* **5**: 175–179.
- Beenken, L. (2001k) *Russula versicolor* J. Schaeff. + *Betula pubescens* Ehrh. *Descriptions of Ectomycorrhizae* **5**: 181–185.
- Beenken, L. (2001l) *Russula vesca* Fr. + *Quercus robur* L. *Descriptions of Ectomycorrhizae* **5**: 187–192.
- Beenken, L. (2001m) *Russula vinosa* Lindbl. + *Picea abies* (L.) H. Karst. *Descriptions of Ectomycorrhizae* **5**: 193–198.
- Beenken, L. (2001n) *Russula virescens* (Schaeff.) Fr. + *Quercus robur* L. *Descriptions of Ectomycorrhizae* **5**: 199–203.
- Beenken, L. & Agerer, R. (1996) '*Piceirhiza stagonopleres*' + *Picea abies* (L.) Karst. *Descriptions of Ectomycorrhizae* **1**: 71–76.
- Beenken, L., Agerer, R. & Bahnweg, G. (1996a) *Inocybe appendiculata* Kühn. + *Picea abies* (L.) Karst. *Descriptions of Ectomycorrhizae* **1**: 35–40.
- Beenken, L., Agerer, R. & Bahnweg, G. (1996b) *Inocybe fuscomarginata* Kühn. + *Salix spec./Populus nigra* L. *Descriptions of Ectomycorrhizae* **1**: 41–46.
- Beenken, L., Agerer, R. & Bahnweg, G. (1996c) *Inocybe obscuroides* (J. Favre) Grund & D. E. Stuntz + *Picea abies* (L.) Karst. *Descriptions of Ectomycorrhizae* **1**: 47–52.
- Beenken, L., Agerer, R. & Bahnweg, G. (1996d) *Inocybe terrigena* (Fr.) Kuyper + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **1**: 53–58.
- Bencivenga, M., Di Massimo, G., Donnini, D. & Tanfulli, M. (1995) Micorrizze inquinanti frequenti nelle piante tartufigene. Nota 1- Inquinanti in vivaio. *Micologia Italiana* **1995** (2): 167–178.
- Bencivenga, M., Donnini, D. & Di Massimo, G. (1992) Analisi delle micorrizze in una tartufigaia coltivata di *Tuber melanosporum* undici anni dopo l'impianto. *Micologia e Vegetazione Mediterranea* **7**: 159–171.
- Bencivenga, M., Tanfulli, M. & Donnini, D. (1997) Micorrizzazione di *Quercus cerris* L. con *Tuber oligospermum* (Tul. & Tul.) Trappe. *Micologia Italiana* **1997** (3): 89–93.
- Berg, B. & Gronbach, E. (1988) *Piceirhiza nigra*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 19. Einhorn Verlag, Schwäbisch Gmünd.
- Berg, B. & Gronbach, E. (1989) *Piceirhiza gelatinosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 30. Einhorn Verlag, Schwäbisch Gmünd.
- Blaschke, H. (1988) *Tuber puberulum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 22. Einhorn Verlag, Schwäbisch Gmünd.
- Bradbury, S. M. (1998) Ectomycorrhizas of lodgepole pine (*Pinus contorta*) seedlings originating from seed in southwestern Alberta cut blocks. *Canadian Journal of Botany* **76**: 213–217.
- Bradbury, S. M., Danielson, R. M. & Visser, S. (1998) Ectomycorrhizas from regenerating stands of lodgepole pine (*Pinus contorta*). *Canadian Journal of Botany* **76**: 218–227.
- Brand, F. (1987a) *Lactarius subdulcis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 5. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1987b) *Lactarius vellereus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 6. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1988a) *Fagirhiza cystidiophora*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 15. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1988b) *Fagirhiza granulosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 16. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1988c) *Fagirhiza tubulosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 17. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1988d) *Laccaria amethystina*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 18. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1989a) Studies on ectomycorrhizae XXI. Beech ectomycorrhizae and rhizomorphs of *Xerocomus chrysenteron* (Boletales). *Nova Hedwigia* **48**: 469–483.
- Brand, F. (1989b) *Xerocomus chrysenteron*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 34. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991a) *Fagirhiza spinulosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 54. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991b) *Fagirhiza setifera*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 55. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991c) *Russula mairei*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 65. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991d) *Fagirhiza fusca*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 56. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991e) *Genea hispidula*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 57. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991f) *Byssocorticium atrovirens*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 51. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991g) *Elaphomyces muricatus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 53. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991h) *Lactarius pallidus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 59. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991i) *Lactarius rubrocinctus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 60. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991j) *Piloderma croceum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 62. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1991k) *Russula illota*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 64. Einhorn Verlag, Schwäbisch Gmünd.

- Brand, F. (1991) *Ectomycorrhizen an Fagus: Charakterisierung und Identifizierung, ökologische Kennzeichnung und unsterile Kultivierung*. [Libri Botanici Vol. 2.] IHW-Verlag, Eching.
- Brand, F. (1992a) *Fagirhiza globulifera*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 70. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1992b) *Lactarius acris*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 72. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1992c) *Cortinarius bolaris*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 67. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1992d) *Cortinarius cinnabarinus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 68. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1992e) *Fagirhiza arachnoidea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 69. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F. (1992f) *Tricholoma sciodes*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 74. Einhorn Verlag, Schwäbisch Gmünd.
- Brand, F., Gronbach, E. & Taylor, A. F. S. (1992) *Piceirhiza bicolorata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 73. Einhorn Verlag, Schwäbisch Gmünd.
- Brunner, I., Amiet, R., Zollinger, M. & Egli, S. (1992) Ectomycorrhizal syntheses with *Picea abies* and three fungal species: a case study on the use of an *in vitro* technique to identify naturally occurring ectomycorrhizae. *Mycorrhiza* **2**: 89–96.
- Buée, M., Vairelles, D. & Garbaye, J. (2004) Year-round monitoring of diversity and potential metabolic activity of the ectomycorrhizal community in a beech (*Fagus sylvatica*) forest subjected to two thinning regimes. *Mycorrhiza* [online], DOI 10.1007/s00572-004-0313-6.
- Ceruti, A., Benvenuti, R. & Luppi Mosca, A. M. (1988) Micorrize di *Fagus sylvatica* con specie di *Lactarius*, *Russula*, *Laccaria* e *Cortinarius*. *Allionia* **28**: 125–134.
- Ceruti, A., Tozzi, M. & Reitano, G. (1985) Sintesi micorrizica tra *Boletus aereus* e *Castanea sativa*. *Allionia* **27**: 5–9.
- Ceruti, A., Tozzi, M. & Reitano, G. (1987) Micorrize di sintesi tra *Boletus edulis*, *Pinus sylvestris* e *Picea excelsa*. *Allionia* **28**: 117–124.
- Chevalier, G. (1973) Synthèse axénique des mycorrhizes de *Tuber brumale* Vitt. a partir de cultures pures du champignon. *Annales de phytopathologie* **5**: 163–182.
- Chu-Chou, M. & Grace, L. J. (1983) Characterization and identification of mycorrhizas of Douglas fir in New Zealand. *European Journal of Forest Pathology* **13**: 251–260.
- Comandini, O. & Pacioni, G. (1997) Mycorrhizae of Asian black truffles, *Tuber himalayense* and *T. indicum*. *Mycotaxon* **63**: 77–86.
- Comandini, O., Haug, I., Rinaldi, A. C. & Kuyper, T. W. (2004) Uniting *Tricholoma sulphureum* and *T. bufonium*. *Mycological Research* **108**: 1162–1171.
- Countess, R. E. & Goodman, D. M. (2000) *Cantharellus formosus* Corner + *Tsuga heterophylla* (Raf.) Sarg. In *A Manual of concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 21. Mycologue Publications, Sidney, BC.
- Cripps, C. (1997a) *Inocybe lacera* (Fr.: Fr.) Kumm. + *Populus tremuloides* Michx. *Descriptions of Ectomycorrhizae* **2**: 19–23.
- Cripps, C. (1997b) *Tricholoma sculpturatum* (Fr.) Quél. + *Populus tremuloides* Michx. *Descriptions of Ectomycorrhizae* **2**: 73–78.
- Cuvelier, J.-J. & Agerer, R. (1991) *Cortinarius armillatus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 52. Einhorn Verlag, Schwäbisch Gmünd.
- Dahlberg, A., Jonsson, L., Nylund, J. E. (1997) Species diversity and distribution of biomass above and below ground among ectomycorrhizal fungi in an old-growth Norway spruce forest in South Sweden. *Canadian Journal of Botany* **75**: 1323–1335.
- Danielson, R. M. (1984a) Ectomycorrhiza formation by the operculate discomycete *Sphaerospora brunnea* (Pezizales). *Mycologia* **76**: 454–461.
- Danielson, R. M. (1984b) Ectomycorrhizal associations in jack pine stands in northeastern Alberta. *Canadian Journal of Botany* **62**: 932–939.
- Danielson, R. M. & Pruden, M. (1989) The ectomycorrhizal status of urban spruce. *Mycologia* **81**: 335–341.
- Danielson, R. M., Zak, J. C. & Parkinson, D. (1984) Mycorrhizal inoculum in a peat deposit formed under a white spruce stand in Alberta. *Canadian Journal of Botany* **63**: 2557–2560.
- De Román, M. & De Miguel, A. M. (2005) Post-fire, seasonal and annual dynamics of the ectomycorrhizal community in a *Quercus ilex* L. forest over a 3-year period. *Mycorrhiza* online, DOI 10.1007/s00572-005-0353-6.
- De Román, M., Agerer, R. & De Miguel, A. M. (2002a) ‘*Quercirhiza cumulosa*’ + *Quercus ilex* L. subsp. *ballota* (Desf.) Samp. *Descriptions of Ectomycorrhizae* **6**: 13–18.
- De Román, M., Agerer, R. & De Miguel, A. M. (2002b) ‘*Quercirhiza stellata*’ + *Quercus ilex* L. subsp. *ballota* (Desf.) Samp. *Descriptions of Ectomycorrhizae* **6**: 19–24.
- Di Battista, C., Bouchard, D., Martin, F., Genere, B., Amirault, J.-M. & Le Tacon, F. (2002) Survival after outplanting of the ectomycorrhizal fungus *Laccaria bicolor* S238N inoculated on Douglas fir (*Pseudotsuga menziesii* (Mirb.) Franco) cuttings. *Annals of Forest Science* **59**: 81–92.
- Di Massimo, G., García-Montero, L. G., Manjón, J. L. & Díez, J. (1996) Hongos micorrizicos competidores de *Tuber nigrum* Bull. (= *Tuber melanosporum* Vitt.) presentes en ecosistemas naturales y viveros del centro de España. *Boletín de la Sociedad Micologica de Madrid* **21**: 189–199.
- Dickie, I. A., Guza, R. C., Krazewski, S. E. & Reich, P. B. (2004) Shared ectomycorrhizal fungi between a herbaceous perennial (*Helianthemum bicknellii*) and oak (*Quercus*) seedlings. *New Phytologist* **164**: 375–382.
- Dominik, T. (1969) Key to ectotrophic mycorrhizae. *Folia Forestalia Polonica* **15**: 309–328.
- Donnini, D. & Bencivenga, M. (1995) Micorrize inquinanti frequenti nelle piante tartufigene. Nota 2 – Inquinanti in campo. *Micologia Italiana* **1995** (2): 185–207.
- Duñabeitia, M. K., Hormilla, S., Salcedo, I. & Peña, J. I. (1996) Ectomycorrhizae synthesized between *Pinus radiata* and eight fungi associated with *Pinus* spp. *Mycologia* **88**: 897–908.
- Eberhardt, J. L., Oberwinkler, F., Verbeken, A., Rinaldi, A. C., Pacioni, G. & Comandini, O. (2000) *Lactarius* ectomycorrhizae on *Abies alba*: morphological description, molecular characterization and taxonomic remarks. *Mycologia* **92**: 860–873.
- Eberhardt, U., Walter, L. & Kottke, I. (1999) Molecular and morphological discrimination between *Tylospora fibrillosa* and *Tylospora asterophora* mycorrhizae. *Canadian Journal of Botany* **77**: 11–21.
- Eberhart, J. & Luoma, D. M. (1996) *Truncocolumella citrina* Zeller + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 9. Mycologue Publications, Sidney, BC.
- Eberhart, J. & Luoma, D. M. (1997) *Lactarius rubrilacteus* Hesler & Smith + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 15. Mycologue Publications, Sidney, BC.
- Eberhart, J. & Luoma, D. M. (2000) *Russula densifolia* (Secr.) Gillet + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 22. Mycologue Publications, Sidney, BC.
- Egli, S., Ayer, F., Peter, M. & Schneider, B. (2001) *Arcangiella borziana* Cavara + *Picea abies* (L.) Karst. *Descriptions of Ectomycorrhizae* **5**: 9–14.

- Etayo, M. L. & De Miguel, A. M. (1998) Estudio de las ectomicorizas en una trufera cultivada situada en Olóriz (Navarra). *Publicaciones de Biología de la Universidad de Navarra, serie Botánica* **11**: 55–114.
- Fassi, B. & De Vecchi, E. (1962) Ricerche sulle micorrizze ectotrofiche del pino strobo in vivaio. I. Descrizione di alcune forme più diffuse in Piemonte. *Allionia* **8**: 133–152.
- Fassi, B. & Fontana, A. (1966) Ricerche sulle micorrizze ectotrofiche del pino strobo in vivaio. II. Micorrizze di *Thelephora terrestris* Ehrh. ex Fries, di *Laccaria laccata* (Scop.) Berk. et Br. e di *Hebeloma mesophaeum* Pers. ex Fries. *Allionia* **12**: 47–53.
- Fischer, C. R. & Agerer, R. (1996) '*Quercirhiza argenteo-brunneola*' + *Quercus ilex* L. *Descriptions of Ectomycorrhizae* **1**: 101–105.
- Fischer, Ch., Suz, L., Martin, M. & Colinas, C. (2004) *Tuber brumale* Vitt. + *Quercus ilex* L. *Descriptions of Ectomycorrhizae* **7–8**: 135–141.
- Fontana, A. (1961) Primo contributo allo studio delle micorrizze dei pioppi in Piemonte. *Allionia* **7**: 87–129.
- Fontana, A. (1964) Simbiosi micorrizica di *Hebeloma hiemale* Bres. con un salice e con un pioppo. *Allionia* **9**: 113–118.
- Fontana, A. & Bonfante-Fasolo, P. (1971) Sintesi micorrizica di *Tuber brumale* Vitt. con *Pinus nigra* Arnold. *Allionia* **17**: 15–18.
- Fontana, A. & Centrella, E. (1967) Ectomicorizze prodotte da funghi ipogei. *Allionia* **13**: 149–175.
- Fransson, P. (2004a) *Craterellus tubaeformis* (Fr.) Quél. (syn. *Cantharellus tubaeformis* Fr.: Fr.) + *Quercus robur* L. *Descriptions of Ectomycorrhizae* **7–8**: 37–43.
- Fransson, P. (2004b) *Russula decolorans* Fr. + *Pinus sylvestris* L. Karst. *Descriptions of Ectomycorrhizae* **7–8**: 109–115.
- Gardes, M. & Bruns, T. D. (1996) Community structure of ectomycorrhizal fungi in a *Pinus muricata* forest: above- and below-ground views. *Canadian Journal of Botany* **74**: 1572–1583.
- Gill, W. M., Guerin-Laguette, A., Lapeyrie, F. & Suzuki, K. (2000) Matsutake – morphological evidence of ectomycorrhiza formation between *Tricholoma matsutake* and host roots in a pure *Pinus densiflora* forest stand. *New Phytologist* **147**: 381–388.
- Gillespie, S. M. K., Durall, D. M. & Hagerman, S. M. (2000) *Thelephora terrestris*-like + *Betula papyrifera* Marsch. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 20. Mycologue Publications, Sidney, BC.
- Giltrap, N. J. (1982) *Hebeloma* spp. as mycorrhizal associates of birch. *Transactions of the British Mycological Society* **79**: 157–160.
- Giomaro, G., Zambonelli, A., Sisti, D., Cecchini, M., Evangelista, V. & Stocchi, V. (2000) Anatomical and morphological characterization of mycorrhizas of five strains of *Tuber borchii* Vittad. *Mycorrhiza* **10**: 107–114.
- Giovannetti, G. & Fontana, A. (1981) Simbiosi micorrizica di *Tuber macrosporum* Vitt. con alcune Fagales. *Allionia* **24**: 13–17.
- Giraud, M. (1988) Prélèvement et analyse de mycorrhizes. In *La truffe, FNPT 10, Congrès de la Trufficulture, Saintes, 27–28 Novembre 1987*: 49–63.
- Godbout, C. & Fortin, J. A. (1983) Morphological features of synthesized ectomycorrhizae of *Alnus crispa* and *A. rugosa*. *New Phytologist* **94**: 249–262.
- Godbout, C. & Fortin, J. A. (1985) Synthesized ectomycorrhizae of aspen: fungal genus level of structural characterization. *Canadian Journal of Botany* **63**: 252–262.
- Golldack, J., Münzenberger, B. & Hüttl, R. (1997a) '*Pinirhiza lactariosimilis*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **2**: 43–48.
- Golldack, J., Münzenberger, B. & Hüttl, R. (1997b) '*Pinirhiza lactogelatinosa*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **2**: 49–53.
- Golldack, J., Münzenberger, B. & Hüttl, R. (1998a) '*Pinirhiza cyaneoviridis*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **3**: 49–54.
- Golldack, J., Münzenberger, B. & Hüttl, R. (1998b) '*Pinirhiza discolor*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **3**: 55–60.
- Golldack, J., Münzenberger, B. & Hüttl, R. (1999a) '*Pinirhiza dimorpha*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **4**: 73–78.
- Golldack, J., Münzenberger, B. & Hüttl, R. (1999b) '*Pinirhiza flexipila*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **4**: 79–84.
- Golldack, J., Münzenberger, B. & Hüttl, R. F. (1996c) *Pinirhiza granulosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 99. Einhorn Verlag, Schwäbisch Gmünd.
- Golldack, J., Münzenberger, B. & Hüttl, R. F. (1998c) *Pinirhiza cyaneoviridis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 126. Einhorn Verlag, Schwäbisch Gmünd.
- Golldack, J., Münzenberger, B. & Hüttl, R. F. (1998d) *Pinirhiza discolor*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 127. Einhorn Verlag, Schwäbisch Gmünd.
- Golldack, J., Münzenberger, B., Agerer, R. & Hüttl, R. (1996a) '*Pinirhiza granulosa*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **1**: 77–81.
- Golldack, J., Münzenberger, B., Agerer, R. & Hüttl, R. (1996b) '*Pinirhiza stellannulata*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **1**: 89–93.
- Golldack, J., Münzenberger, B., Agerer, R. & Hüttl, R. (1996d) *Pinirhiza stellannulata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 101. Einhorn Verlag, Schwäbisch Gmünd.
- Goodman, D. M. (1996a) *Tomentella*-like + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 2. Mycologue Publications, Sidney, BC.
- Goodman, D. M. (1996b) Unidentified + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 3. Mycologue Publications, Sidney, BC.
- Goodman, D. M. (1996c) Unidentified + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 4. Mycologue Publications, Sidney, BC.
- Goodman, D. M. (1996d) Unidentified + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 5. Mycologue Publications, Sidney, BC.
- Goodman, D. M. (1996e) *Rhizopogon vinicolor*-like + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 7. Mycologue Publications, Sidney, BC.
- Goodman, D. M. (1996f) Unidentified + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 8. Mycologue Publications, Sidney, BC.
- Goodman, D. M. (1997a) Unidentified + *Tsuga heterophylla* (Raf.) Sarg. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 12. Mycologue Publications, Sidney, BC.
- Goodman, D. M. (1997b) *Russula*-like + *Tsuga heterophylla* (Raf.) Sarg. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 13. Mycologue Publications, Sidney, BC.
- Goodman, D. M. (1997c) Unidentified + *Tsuga heterophylla* (Raf.) Sarg. In *A Manual of Concise Descriptions of North American*

- Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 14. Mycologue Publications, Sidney, BC.
- Goodman, D. M. & Trofymow, J. A. (1996) *Piloderma fallax* (Libert) Stalpers + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 1. Mycologue Publications, Sidney, BC.
- Goodman, D. M., Durall, D. M., Trofymow, J. A. & Berch, S. M. (eds). (1996–2000) *A Manual of concise Descriptions of North American Ectomycorrhizae*. Mycologue Publications, Sidney, BC.
- Granetti, B. (1995) Caratteristiche morfologiche, biometriche e strutturali delle micorrizze di *Tuber* di interesse economico. *Micologia italiana* **1995** (2): 101–117.
- Granetti, B. & Angelini, P. (1992) Competizione tra alcuni funghi ectomicorrizici e *Tuber melanosporum* in una tartufoia coltivata. *Micologia e Vegetazione Mediterranea* **7**: 173–188.
- Granetti, B. & Baciarelli Falini, L. (1997) Competizione tra le micorrizze di *Tuber melanosporum* Vitt. e quelle di altri funghi in una tartufoia coltivata a *Quercus ilex* L. *Micologia Italiana* **1997** (3): 45–59.
- Granetti, B., Angelini, P. & Rubini, A. (1995a) Morfologia e struttura delle micorrizze di *Tuber magnatum* Pico e *Tuber borchii* Vitt. con *Tilia platyphyllos* Scop. *Micologia Italiana* **1995** (2): 27–34.
- Granetti, B., Rubini, A. & Angelini, P. (1995b) Analisi comparativa morfo-biometrica e strutturale delle micorrizze di *Tuber aestivum* Vitt. con alcune piante forestali. *Micologia Italiana* **1995** (2): 48–63.
- Gronbach, E. (1988) Charakterisierung und Identifizierung von Ektomykorrhizen in einem Fichtenbestand mit Untersuchungen zur Merkmalsvariabilität in sauer beregneten Flächen. *Bibliotheca Mycologica* **125**: 1–217.
- Gronbach, E. (1989a) *Hygrophorus pustulatus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 26. Einhorn Verlag, Schwäbisch Gmünd.
- Gronbach, E. (1989b) *Piceirhiza chordata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 28. Einhorn Verlag, Schwäbisch Gmünd.
- Gronbach, E. (1989c) *Piceirhiza conspicua*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 29. Einhorn Verlag, Schwäbisch Gmünd.
- Gronbach, E. (1989d) *Piceirhiza glutinosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 31. Einhorn Verlag, Schwäbisch Gmünd.
- Gronbach, E. (1989e) *Piceirhiza guttata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 32. Einhorn Verlag, Schwäbisch Gmünd.
- Gronbach, E. & Agerer, R. (1988) *Cortinarius obtusus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 12. Einhorn Verlag, Schwäbisch Gmünd.
- Gronbach, E. & Berg, B. (1988) *Piceirhiza obscura*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 20. Einhorn Verlag, Schwäbisch Gmünd.
- Gutiérrez, A., Morte, A. & Honrubia, M. (2003) Morphological characterization of the mycorrhiza formed by *Helianthemum almeriense* Pau with *Terfezia claveri* Chatin and *Picoa lefebvrei* (Pat.) Maire. *Mycorrhiza* **13**: 299–307.
- Hagerman, S. M., Jones, M. D., Bradfield, G. E., Gillespie, M. & Durall, D. M. (1999) Effects of clear-cut logging on the diversity and persistence of ectomycorrhizae at a subalpine forest. *Canadian Journal of Forest Research* **29**: 124–134.
- Hagerman, S. M., Sakakibara, S. M. & Durall, D. M. (2001) The potential of woody understory plants to provide refuge for ectomycorrhizal inoculum at an interior Douglas-fir forest after clear-cut logging. *Canadian Journal of Forest Research* **31**: 711–721.
- Hahn, C. (2001) *Boletus rhodoxanthus* Kallenb. + *Cistus cf. ladanifer* L. *Descriptions of Ectomycorrhizae* **5**: 15–22.
- Harniman, S. M. K. & Durall, D. M. (1996a) *Amphinema byssoides*-like + *Picea engelmannii* (Parry) Engelm. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 6. Mycologue Publications, Sidney, BC.
- Harniman, S. M. K. & Durall, D. M. (1996b) *Cenococcum geophilum* Fr. + *Picea engelmannii* (Parry) Engelm. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 10. Mycologue Publications, Sidney, BC.
- Haug, I. (2002a) *Hebeloma velutipes*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 150. Einhorn Verlag, Schwäbisch Gmünd.
- Haug, I. (2002b) Identification of *Picea*-ectomycorrhizae by comparing DNA-sequences. *Mycological Progress* **1**: 167–178.
- Haug, I., Weber, R., Oberwinkler, F. & Tschén, J. (1994) The mycorrhizal status of Taiwanese trees and the description of some ectomycorrhizal types. *Trees* **8**: 237–253.
- Haug, I., Weiß, M., Homeier, J., Oberwinkler, F. & Kottke, I. (2005) *Russulaceae* and *Thelephoraceae* form ectomycorrhizas with members of the *Nyctaginaceae* (*Caryophyllales*) in the tropical mountain rain forest of southern Ecuador. *New Phytologist* **165**: 923–936.
- Hoch, M., Goodman, D. M. & Chyplýk, C. (1998) *Suillus caerulescens* A.H. Smith & Thiers + *Pseudotsuga menziesii* (Mirb.) Franco. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 19. Mycologue Publications, Sidney, BC.
- Ingleby, K. (1999a) *Inocybe avellana* Horak + *Shorea leprosula* Miq. *Descriptions of Ectomycorrhizae* **4**: 55–60.
- Ingleby, K. (1999b) *Scleroderma sinnamarense* Mont. + *Gnetum africanum* Welw. *Descriptions of Ectomycorrhizae* **4**: 127–133.
- Ingleby, K., Mason, P. A., Last, F. T. & Fleming, L. V. (1990) *Identification of Ectomycorrhizas*. Institute of Terrestrial Ecology Research Publication No. 5. HMSO, London.
- Jakucs, E. (1998) '*Fagirhiza vermiculiformis*' + *Fagus sylvatica* L. *Descriptions of Ectomycorrhizae* **3**: 7–11.
- Jakucs, E. (2001) '*Quercirhiza alboviolacea*' + *Quercus robur* L. *Descriptions of Ectomycorrhizae* **5**: 61–65.
- Jakucs, E. (2002a) Ectomycorrhizae of *Populus alba* L. in South Hungary. *Phyton Botanicae* **42** (2): 199–210.
- Jakucs, E. (2002b) *Hebeloma ammophilum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 145. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. (2002c) *Inocybe heimii*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 146. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. (2002d) *Lactarius controversus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 143. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. (2002e) *Quercirhiza alboviolacea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 148. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. (2002f) *Russula amoenolens*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 142. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. (2002g) *Scleroderma bovista*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 144. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. (2002h) *Tomentella pilosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 141. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. (2002i) *Tomentella subtestacea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 147. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. (2002j) *Xerocomus lanatus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 149. Einhorn Verlag, Schwäbisch Gmünd.

- Jakucs, E. & Agerer, R. (1998) *Fagirhiza vermiculiformis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 118. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. & Agerer, R. (1999a) *Scleroderma bovista* Fr. + *Populus alba* L. *Descriptions of Ectomycorrhizae* **4**: 121–126.
- Jakucs, E. & Agerer, R. (1999b) *Tomentella pilosa* (Burt) Bourdot & Galzin + *Populus alba* L. *Descriptions of Ectomycorrhizae* **4**: 135–140.
- Jakucs, E. & Agerer, R. (2001) *Tomentella subtestacea* Bourdot & Galzin + *Populus alba* L. *Descriptions of Ectomycorrhizae* **5**: 213–219.
- Jakucs, E. & Beenken, L. (1999) *Russula amoenolens* Romagn. + *Populus alba* L. *Descriptions of Ectomycorrhizae* **4**: 115–119.
- Jakucs, E. & Beenken, L. (2001) *Xerocomus lanatus* (Rostk.) Sing. + *Quercus cerris* L. *Descriptions of Ectomycorrhizae* **5**: 221–225.
- Jakucs, E. & Bratek, Z. (1998a) *Genea verrucosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 120. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E. & Bratek, Z. (1998b) *Rhizopogon vulgaris* var. *intermedius*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 136. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E., Agerer, R. & Bratek, Z. (1997) '*Quercirhiza fibulocystidiata*' + *Quercus* spec. *Descriptions of Ectomycorrhizae* **2**: 67–71.
- Jakucs, E., Agerer, R. & Bratek, Z. (1998c) *Quercirhiza fibulocystidiata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 132. Einhorn Verlag, Schwäbisch Gmünd.
- Jakucs, E., Bratek, Z. & Agerer, R. (1998a) *Genea verrucosa* Vitt. + *Quercus* spec. *Descriptions of Ectomycorrhizae* **3**: 7–11.
- Jakucs, E., Bratek, Z., Beenken, L. & Agerer, R. (1998b) *Rhizopogon vulgaris* (Vitt.) M. Lange var. *intermedius* Svrček + *Pinus nigra* Arn. *Descriptions of Ectomycorrhizae* **3**: 111–116.
- Jakucs, E., Kovács, G. M., Agerer, R., Romsics, C. & Eros-Honti, Z. (2004) Morphological-anatomical characterization and molecular identification of *Tomentella stupeosa* ectomycorrhizae and related anatomotypes. *Mycorrhiza* [online]: DOI 10.1007/s00572-004-0326-1.
- Jakucs, E., Kovács, G. M., Szedlay, G. & Eros-Honti, Z. (2005) Morphological and molecular diversity and abundance of tomentelloid ectomycorrhizae in broad-leaved forests of the Hungarian Plain. *Mycorrhiza* [online]: DOI 10.1007/s00572-005-0351-8.
- Jakucs, E., Magyar, L. & Beenken, L. (1999) *Hebeloma ammophilum* Bohus + *Fumana procumbens* (Dun.) Gr. Godr. *Descriptions of Ectomycorrhizae* **4**: 49–54.
- Jakucs, E., Majoros, E. & Beenken, L. (2001) *Lactarius controversus* Pers. + *Populus alba* L. *Descriptions of Ectomycorrhizae* **5**: 55–59.
- Jany, J.-L., Garbaye, J. & Martin, F. (2002) *Cenococcum geophilum* populations show a high degree of genetic diversity in beech forests. *New Phytologist* **154**: 651–659.
- Jones, M. D., Durall, D. M., Harniman, S. M. K., Classen, D. & Simard, S. W. (1997) Ectomycorrhizal diversity on *Betula papyrifera* and *Pseudotsuga menziesii* seedlings grown in the greenhouse or outplanted in single-species and mixed plots in southern British Columbia. *Canadian Journal of Forest Research* **27**: 1872–1889.
- Kaldorf, M., Renker, C., Fladung, M. & Buscot, F. (2004) Characterization and spatial distribution of ectomycorrhizas colonizing aspen clones released in an experimental field. *Mycorrhiza* **14**: 295–306.
- Kernaghan, G. (2001) Ectomycorrhizal fungi at tree line in the Canadian Rockies. II. Identification of ectomycorrhizae by anatomy and PCR. *Mycorrhiza* **10**: 217–229.
- Kernaghan, G. & Berch, S. M. (1997) *Lactarius scrobiculatus* (Fr.) Fr. + *Tsuga heterophylla* (Raf.) Sarg. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 11. Mycologue Publications, Sidney, BC.
- Kernaghan, G., Currah, R. S. & Bayer, R. J. (1997) Russulaceous ectomycorrhizae of *Abies lasiocarpa* and *Picea engelmannii*. *Canadian Journal of Botany* **75**: 1843–1850.
- Kovács, G. & Jakucs, E. (2001) '*Helianthemirhiza hirsuta*' + *Helianthemum ovatum* (Viv.) Dun. *Descriptions of Ectomycorrhizae* **5**: 49–53.
- Kovács, G., Jakucs, E., Diez, J., Manjón, J. L. & Esteve-Raventós, F. (2002) *Cortinarius hinnuleus* Fr. + *Betula celtiberica* Rothm. & Vasc. *Descriptions of Ectomycorrhizae* **6**: 7–11.
- Kraigher, H. & Agerer, R. (1996) *Hydnum rufescens*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 92. Einhorn Verlag, Schwäbisch Gmünd.
- Kraigher, H., Agerer, R. & Javornik, B. (1995) Ectomycorrhizae of *Lactarius lignyotus* on Norway spruce, characterized by anatomical and molecular tools. *Mycorrhiza* **5**: 175–180.
- Kuss, P., Raidl, S. & Beenken, L. (2004) *Cortinarius huronensis* Ammirati & Smith var. *huronensis* + *Pinus rotundata* Link. *Descriptions of Ectomycorrhizae* **7–8**: 21–27.
- Lefevre, C. K. & Müller, W. R. (1998) *Tricholoma magnivelare* (Peck) Redhead + *Pinus contorta* Dougl. var. *latifolia* Engelm. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 18. Mycologue Publications, Sidney, BC.
- Luppi, A. M. & Gautero, C. (1967) Ricerche sulle micorrizze di *Quercus robur*, *Q. petraea* e *Q. pubescens* in Piemonte. *Allionia* **13**: 129–148.
- Magyar, L., Beenken, L. & Jakucs, E. (1999) *Inocybe heimii* Bon + *Fumana procumbens* (Dun.) Gr. Godr. *Descriptions of Ectomycorrhizae* **4**: 61–65.
- Massicotte, H. B., Melville, L. H., Peterson, R. L. & Molina, R. (1999a) Biology of the ectomycorrhizal fungal genus, *Rhizopogon*. IV. Comparative morphology and anatomy of ectomycorrhizas synthesized between several *Rhizopogon* species on Ponderosa pine (*Pinus ponderosa*). *New Phytologist* **142**: 355–370.
- Massicotte, H. B., Melville, L. H., Peterson, R. L. & Molina, R. (2000) Comparative anatomy of ectomycorrhizas synthesized on Douglas fir by *Rhizopogon* spp. and the hypogeous relative *Truncocolumella citrina*. *New Phytologist* **147**: 389–400.
- Massicotte, H. B., Molina, R., Tackaberry, L. E., Smith, J. & Amaranthus, M. P. (1999b) Diversity and host specificity of ectomycorrhizal fungi retrieved from three adjacent forest sites by five host species. *Canadian Journal of Botany* **77**: 1053–1076.
- Mello, A., Fontana, A., Meotto, F., Comandini, O. & Bonfante, P. (2001) Molecular and morphological characterization of *Tuber magnatum* mycorrhizas in a long-term survey. *Microbiological Research* **155**: 279–284.
- Meotto, F. (1988) *Laccaria laccata* (Scop. ex Fr.) Berk. & Br. and *Acacia dealbata* Link ectomycorrhizae. *Allionia* **28**: 103–108.
- Meotto, F. & Carraturo, P. (1988) Ectomicorrizia di *Sphaerospora brunnea* (A. & S.) Svrček & Kubicka in piantine tartufigene. *Allionia* **28**: 109–116.
- Meotto, F. & Pellegrino, S. (1989) Comportamento in campo di querce e castagni micorrizzati con *Boletus edulis* Bull. *L'Informatore Agrario* **47**: 57–61.
- Meotto, F., Mello, A., Nosenzo, C. & Vezzola, V. (1997) Morphological and molecular characterization of *Amanita caesarea* ectomycorrhizas. *Allionia* **35**: 87–93.
- Meotto, F., Nosenzo, C. & Fontana, A. (1995) Le micorrizze delle specie pregiate di *Tuber*. *L'Informatore Agrario* **31**: 41–45.
- Meotto, F., Pellegrino, S. & Craddock, J. H. (1994) Funghi ectomicorrizici del castagno con particolare riferimento ai funghi eduli. *Italus Hortus* **1**: 58–64.
- Miller, S. L., Koo, C. D. & Molina, R. (1990) Characterization of red alder ectomycorrhizae: a preface to monitoring below-ground ecological responses. *Canadian Journal of Botany* **69**: 516–531.
- Mleczo, P. (1996a) '*Pinirhiza lutea*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **1**: 83–88.

- Mleczko, P. (1996b) *Pinirhiza lutea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 100. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (1997a) *Paxillus involutus* (Batsch) Fr. + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 2: 25–30.
- Mleczko, P. (1997b) '*Populirhiza pustulosa*' + *Populus tremula* L. *Descriptions of Ectomycorrhizae* 2: 61–66.
- Mleczko, P. (1998a) '*Pinirhiza globulifera*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 3: 61–66.
- Mleczko, P. (1998b) '*Pinirhiza gomphidioidea*' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 3: 67–72.
- Mleczko, P. (1998c) *Pinirhiza gomphidioidea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 128. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (1998d) *Populirhiza pustulosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 131. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002a) *Amanita citrina*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 159. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002b) *Cantharellus cibarius*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 160. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002c) *Craterellus tubaeformis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 161. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002d) *Pinirhiza amyloidea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 162. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002e) *Pinirhiza crystallonitida*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 163. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002f) *Pinirhiza ligulata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 164. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002g) *Pinirhiza luteomicacea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 165. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002h) *Rhodocollybia butyracea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 166. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002i) *Russula nigricans*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 167. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2002j) *Russula sardonica*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 168. Einhorn Verlag, Schwäbisch Gmünd.
- Mleczko, P. (2004a) *Amanita citrina* (Schaeff.) S. F. Gray + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 1–10.
- Mleczko, P. (2004b) *Cantharellus cibarius* Fr. + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 11–20.
- Mleczko, P. (2004c) *Craterellus tubaeformis* (Bull.) Quél. + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 29–36.
- Mleczko, P. (2004d) *Pinirhiza amyloidea* + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 59–68.
- Mleczko, P. (2004e) *Pinirhiza crystallonitida* + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 69–77.
- Mleczko, P. (2004f) *Pinirhiza ligulata* + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 79–86.
- Mleczko, P. (2004g) *Pinirhiza luteomicacea* + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 87–94.
- Mleczko, P. (2004h) *Rhodocollybia butyracea* (Bull.: Fr.) Lennox (forma *butyracea*) + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 101–108.
- Mleczko, P. (2004i) *Russula nigricans* Fr. + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 117–125.
- Mleczko, P. (2004j) *Russula sardonica* Fr. + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 7–8: 127–134.
- Mohan, V., Natarajan, K. & Ingleby, K. (1993) Anatomical studies on ectomycorrhizas. III. The ectomycorrhizas produced by *Rhizopogon luteolus* and *Scleroderma citrinum* on *Pinus patula*. *Mycorrhiza* 3: 51–56.
- Montecchio, L. & Agerer, R. (1997) '*Piceirhiza cornuta*' + *Picea abies* (L.) Karst. *Descriptions of Ectomycorrhizae* 2: 31–35.
- Montecchio, L., Rossi, S. & Causin, R. (2001b) '*Quercirhiza incrustata*' + *Quercus ilex* L. *Descriptions of Ectomycorrhizae* 5: 73–78.
- Montecchio, L., Rossi, S., Grendene, A. & Causin, R. (2001a) *Cortinarius ionochlorus* R. Maire + *Quercus ilex* L. *Descriptions of Ectomycorrhizae* 5: 35–40.
- Montecchio, L., Rossi, S., Grendene, A. & Causin, R. (2002) *Amphinema byssoides* (Pers.: Fr.) J. Erikss. + *Quercus ilex* L. *Descriptions of Ectomycorrhizae* 6: 1–6.
- Montecchio, L., Rossi, S., Grendene, A. & Causin, R. (2004) *Quercirhiza cistidiophora* + *Quercus ilex* L. *Descriptions of Ectomycorrhizae* 7–8: 95–100.
- Montecchio, L., Rossi, S., Grendene, A., Causin, R. & Mutto Accordi, S. (1999a) '*Quercirhiza araneosa*' + *Quercus ilex* L. *Descriptions of Ectomycorrhizae* 4: 91–96.
- Montecchio, L., Rossi, S., Grendene, A., Causin, R. & Mutto Accordi, S. (1999b) '*Quercirhiza bicolor*' + *Quercus ilex* L. *Descriptions of Ectomycorrhizae* 4: 97–102.
- Montecchio, L., Rossi, S., Grendene, A., Causin, R. & Mutto Accordi, S. (1998a) '*Quercirhiza sublutea*' + *Quercus ilex* L. *Descriptions of Ectomycorrhizae* 3: 93–98.
- Montecchio, L., Rossi, S., Grendene, A., Causin, R. & Mutto Accordi, S. (1998b) *Quercirhiza sublutea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 133. Einhorn Verlag, Schwäbisch Gmünd.
- Moser, A. M., Petersen, C. A., D'Allura, J. A. & Southworth, D. (2005) Comparison of ectomycorrhizas of *Quercus garryana* (Fagaceae) on serpentine and non-serpentine soils in southwestern Oregon. *American Journal of Botany* 92: 224–230.
- Moyersoen, B. (1996a) '*Tetraberliniaerhiza bicolor*' + *Tetraberlinia bifoliolata* (Harms) Hauman. *Descriptions of Ectomycorrhizae* 1: 137–141.
- Moyersoen, B. (1996b) '*Tetraberliniaerhiza cerviformis*' + *Tetraberlinia bifoliolata* (Harms) Hauman. *Descriptions of Ectomycorrhizae* 1: 143–147.
- Moyersoen, B. (1996c) '*Tetraberliniaerhiza heterocystidia*' + *Tetraberlinia bifoliolata* (Harms) Hauman. *Descriptions of Ectomycorrhizae* 1: 149–153.
- Moyersoen, B. (1996d) *Tetraberliniaerhiza bicolor*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 107. Einhorn Verlag, Schwäbisch Gmünd.
- Moyersoen, B. (1996e) *Tetraberliniaerhiza cerviformis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 108. Einhorn Verlag, Schwäbisch Gmünd.
- Moyersoen, B. (1996f) *Tetraberliniaerhiza heterocystidia*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 109. Einhorn Verlag, Schwäbisch Gmünd.
- Moyersoen, B. & Beever, R. E. (2004) Abundance and characteristics of *Pisolithus* ectomycorrhizas in New Zealand geothermal areas. *Mycologia* 96: 1225–1232.
- Müller, W. R. (1994) *Betulaerhiza hystrix*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 83. Einhorn Verlag, Schwäbisch Gmünd.
- Müller, W. & Agerer, R. (1990) Studies on ectomycorrhizae XXXI. *Betulaerhiza hystrix*, an unidentified mycorrhiza on *Betula pendula*. *Cryptogamic Botany* 2: 64–68.
- Müller, W. & Agerer, R. (1991) *Leccinum scabrum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 61. Einhorn Verlag, Schwäbisch Gmünd.
- Müller, W. R. & Agerer, R. (1996a) *Hysterangium crassirhachis* Zeller & Dodge + *Pseudotsuga menziesii* (Mirb.) Franco. *Descriptions of Ectomycorrhizae* 1: 29–34.
- Müller, W. R. & Agerer, R. (1996b) '*Pseudotsugaerhiza baculifera*' + *Pseudotsuga menziesii* (Mirb.) Franco. *Descriptions of Ectomycorrhizae* 1: 95–100.

- Müller, W. R. & Agerer, R. (1996c) *Hysterangium crassirhachis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 93. Einhorn Verlag, Schwäbisch Gmünd.
- Müller, W. R. & Agerer, R. (1996d) *Pseudotsugaerhiza baculifera*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 102. Einhorn Verlag, Schwäbisch Gmünd.
- Müller, W. R., Rauscher, T., Agerer, R. & Chevalier, G. (1996a) *Tuber aestivum* Vitt. + *Corylus avellana* L. *Descriptions of Ectomycorrhizae* 1: 167–172.
- Müller, W. R., Rauscher, T., Agerer, R. & Chevalier, G. (1996b) *Tuber uncinatum* Chat. + *Corylus avellana* L. *Descriptions of Ectomycorrhizae* 1: 179–183.
- Münzenberger, B., Metzler, B., Kottke, I. & Oberwinkler, F. (1986) Morphologische und anatomische Charakterisierung der Mykorrhiza *Lactarius deterrimus-Picea abies in vitro*. *Zeitschrift für Mykologie* 52: 407–422.
- Nouhra, E. R., Horton, T. R., Cazares, E. & Castellano, M. (2005) Morphological and molecular characterization of selected *Ramaria* mycorrhizae. *Mycorrhiza* 15: 55–59.
- Nuytinck, J., Verbeken, A., Rinaldi, A. C., Leonardi, M., Pacioni, G. & Comandini, O. (2004) Characterization of *Lactarius tesquorum* ectomycorrhizae on *Cistus* sp. and molecular phylogeny of related European *Lactarius* taxa. *Mycologia* 96: 272–282.
- Palenzona, M. (1969) Sintesi micorrizica tra *Tuber aestivum* Vitt., *Tuber brumale* Vitt., *Tuber melanosporum* Vitt. e semenzali di *Corylus avellana* L. *Allionia* 15: 121–131.
- Palenzona, M. & Fontana, A. (1978) Synthèse des mycorrhizes de *Tuber magnatum* Pico avec semis de *Quercus pubescens* Willd. *Mushroom Science X (Part I), Proceedings of the 10th International Congress on the Science and Cultivation of Edible Fungi*: 1007–1012.
- Palenzona, M., Chevalier, G. & Fontana, A. (1972) Sintesi micorrizica tra i miceli in coltura di *Tuber brumale*, *T. melanosporum*, *T. rufum* e semenzali di conifere e latifoglie. *Allionia* 18: 41–52.
- Palfner, G. (1995a) *Quercirhiza squamosa*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 86. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (1995b) *Xerocomus subtomentosus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 90. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (1996a) *Thaxterogaster albocanus* Horak & Moser + *Nothofagus pumilio* (Poep. et Endl.) Krasser. *Descriptions of Ectomycorrhizae* 1: 155–160.
- Palfner, G. (1996b) *Thaxterogaster albocanus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 110. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (1997) *Descolea antarctica* Singer + *Nothofagus alpina* (Poep. et Endl.) Oerst. *Descriptions of Ectomycorrhizae* 2: 7–12.
- Palfner, G. (1998a) *Balsamia alba*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 114. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (1998b) *Descolea antarctica*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 116. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (1998c) *Lactarius chrysorrhoeus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 121. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (1998d) *Leucangium carthusianum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 123. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (2001) Taxonomische Studien an Ektomykorrhizen aus den *Nothofagus*-Wäldern Mittelsüchiles. *Bibliotheca Mycologica* 190: 1–243.
- Palfner, G. (2002a) *Austropaxillus boletinoides*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 151. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (2002b) *Cortinarius austrosalor*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 152. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (2002c) *Cortinarius magellanicus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 153. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. (2002d) *Gautieria inapire*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 154. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. & Agerer, A. (1998a) *Balsamia alba* Harkness + *Pinus jeffreyi* Grev. & Balf. *Descriptions of Ectomycorrhizae* 3: 1–6.
- Palfner, G. & Agerer, R. (1996) *Quercirhiza squamosa* eine nichtidentifizierte Ektomykorrhiza an *Quercus robur*. *Sendtnera* 3: 137–145.
- Palfner, G. & Agerer, R. (1998b) *Leucangium carthusianum* (Tul.) Paol. + *Pseudotsuga menziesii* (Mirb.) Franco. *Descriptions of Ectomycorrhizae* 3: 37–42.
- Palfner, G. & Godoy, R. (1996a) '*Notofagirhiza vinicolor*' + *Nothofagus pumilio* (Poep. et Endl.) Krasser. *Descriptions of Ectomycorrhizae* 1: 65–70.
- Palfner, G. & Godoy, R. (1996b) *Russula fuegiana* Singer + *Nothofagus pumilio* (Poep. et Endl.) Krasser. *Descriptions of Ectomycorrhizae* 1: 131–136.
- Palfner, G. & Godoy, R. (1996c) *Nothofagirhiza vinicolor*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer ed.), pl. 98. Einhorn Verlag, Schwäbisch Gmünd.
- Palfner, G. & Godoy, R. (1996d) *Russula fuegiana*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 106. Einhorn Verlag, Schwäbisch Gmünd.
- Peter, M., Ayer, F., Egli, S. & Honegger, R. (2001) Above and below-ground community structure of ectomycorrhizal fungi in three Norway spruce *Picea abies* stands in Switzerland. *Canadian Journal of Botany* 79: 1134–1151.
- Pigott, C. D. (1982) Fine structure of mycorrhiza formed by *Cenococcum geophilum* Fr. on *Tilia cordata* Mill. *New Phytologist* 92: 501–512.
- Pillukat, A. (1996) *Lactarius salmonicolor* R. Heim & Leclair + *Abies alba* Mill. *Descriptions of Ectomycorrhizae* 1: 59–64.
- Pillukat, A. (1998) *Lactarius salmonicolor*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 122. Einhorn Verlag, Schwäbisch Gmünd.
- Pirazzi, R. (1998) Morfologia delle micorrize di tartufi minori: *Tuber rufum* Pico, *T. panniferum* Tull. e *T. excavatum* Vitt. *Micologia Italiana* 1998 (1): 77–83.
- Pritsch, K., Munch, J. C. & Buscot, F. (1997) Morphological and anatomical characterization of black alder *Alnus glutinosa* (L.) Gaertn. ectomycorrhizas. *Mycorrhiza* 7: 201–216.
- Raidl, S. (1998a) *Rhizopogon melanogastroides*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 135. Einhorn Verlag, Schwäbisch Gmünd.
- Raidl, S. (1998b) *Tomentella ferruginea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 137. Einhorn Verlag, Schwäbisch Gmünd.
- Raidl, S. (1999) *Chamonixia caespitosa* Rolland + *Picea abies* (L.) Karst. *Descriptions of Ectomycorrhizae* 1: 23–28.
- Raidl, S. & Agerer, R. (1998a) *Hysterangium stoloniferum* Tul & Tul. + *Picea abies* (L.) Karst. *Descriptions of Ectomycorrhizae* 3: 31–35.
- Raidl, S. & Agerer, R. (1998b) *Rhizopogon roseolus* (Corda) Th. M. Fr. + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* 3: 105–110.
- Raidl, S. & Müller, W. R. (1996) *Tomentella ferruginea* (Pers.) Pat. + *Fagus sylvatica* L. *Descriptions of Ectomycorrhizae* 1: 161–166.
- Raidl, S., Beenken, L. & Agerer, R. (1998) *Rhizopogon melanogastroides* M. Lange + *Pinus mugo* Turra. *Descriptions of Ectomycorrhizae* 3: 99–104.
- Rauscher, T. & Chevalier, G. (1995a) *Tuber melanosporum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 87. Einhorn Verlag, Schwäbisch Gmünd.
- Rauscher, T. & Chevalier, G. (1995b) *Tuber mesentericum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 88. Einhorn Verlag, Schwäbisch Gmünd.
- Rauscher, T. & Chevalier, G. (1995c) *Tuber rufum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 89. Einhorn Verlag, Schwäbisch Gmünd.

- Rauscher, T., Agerer, R. & Chevalier, G. (1995) Ektomykorrhizen von *Tuber melanosporum*, *Tuber mesentericum* und *Tuber rufum* (*Tuberales*) an *Corylus avellana*. *Nova Hedwigia* **61** (3–4): 281–322.
- Rauscher, T., Müller, W. R., Agerer, R. & Chevalier, G. (1996a) *Tuber borchii* Vitt. + *Corylus avellana* L. *Descriptions of Ectomycorrhizae* **1**: 173–178.
- Rauscher, T., Müller, W. R., Chevalier, G. & Agerer, R. (1996b) *Tuber aestivum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 112. Einhorn Verlag, Schwäbisch Gmünd.
- Rauscher, T., Müller, W. R., Chevalier, G. & Agerer, R. (1996c) *Tuber borchii*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 113. Einhorn Verlag, Schwäbisch Gmünd.
- Richter, D. L. & Bruhn, J. N. (1990) *Scleroderma citrinum* (*Gasteromycetes*, *Sclerodermatales*) and *Larix decidua* form ectomycorrhizae in pure culture. *Nova Hedwigia* **50**: 355–360.
- Rose, R. W., Gerald Van Dyke, C. & Davey, C. B. (1981) Scanning electron microscopy of three types of ectomycorrhizae formed on *Eucalyptus nova-anglica* in the southeastern United States. *Canadian Journal of Botany* **59**: 683–688.
- Rubini, A., Paolocci, F., Granetti, B. & Arcioni, S. (2001) Morphological characterization of molecular-typed *Tuber magnatum* ectomycorrhizae. *Mycorrhiza* **11**: 179–185.
- Sáez, R. & De Miguel, A. M. (1995) *La trufa negra: Tuber melanosporum* Vitt. *Guía práctica de truficultura*. ITGA, Universidad de Navarra, Pamplona.
- Scannerini, S. & Palenzona, M. (1967) Ricerche sulle ectomicorrizze di *Pinus strobus* in vivaio. III. Micorrizze di *Tuber albidum* Pico. *Allionia* **13**: 187–194.
- Schramm, J. R. (1966) Plant colonization studies on black wastes from anthracite mining in Pennsylvania. *Transactions of the American Philosophical Society* **56**: 1–194.
- See, L. S., Alexander, I. J. & Watling, R. (1997) Ectomycorrhizas and putative ectomycorrhizal fungi of *Shorea leprosula* Miq. (*Dipterocarpaceae*). *Mycorrhiza* **7**: 63–81.
- Selosse, M.-A., Bauer, R. & Moyersoen, B. (2002) Basal hymenomyces belonging to the *Sebacinaceae* are ectomycorrhizal on temperate deciduous forests. *New Phytologist* **155**: 183–195.
- Stendell, E. R., Horton, T. R. & Bruns, T. D. (1999) Early effects of prescribed fire on the structure of the ectomycorrhizal fungus community in a Sierra Nevada ponderosa pine forest. *Mycological Research* **103**: 1353–1359.
- Taylor, A. F. S. & Alexander, I. J. (1991) Ectomycorrhizal synthesis with *Tylospora fibrillosa*, a member of the *Corticaceae*. *Mycological Research* **95**: 381–384.
- Taylor, D. L. & Bruns, T. D. (1999) Community structure of ectomycorrhizal fungi in a *Pinus muricata* forest: minimal overlap between the mature forest and resistant propagule communities. *Molecular Ecology* **8**: 1837–1850.
- Tedersoo, L., Kõljalg, U., Hallenberg, N. & Larsson, K.-H. (2003) Fine scale distribution of ectomycorrhizal fungi and roots across substrate layers including coarse woody debris in a mixed forest. *New Phytologist* **159**: 153–165.
- Thomas, G. W. & Jackson, R. M. (1979) Sheathing mycorrhizas of nursery grown *Picea sitchensis*. *Transactions of the British Mycological Society* **73** (1): 117–125.
- Torres, P. & Honrubia, M. (1994) Ectomycorrhizal associations proven for *Pinus halepensis*. *Israel Journal of Plant Sciences* **42**: 51–58.
- Torres, P. & Honrubia, M. (1997) Changes and effects of a natural fire on ectomycorrhizal inoculum potential of soil in a *Pinus halepensis* forest. *Forest Ecology and Management* **96**: 189–196.
- Torres, P., Roldán, A., Lansac, A. R. & Martín, A. (1995) Ectomycorrhizal formation between *Cistus ladanifer* and *Laccaria laccata*. *Nova Hedwigia* **60**: 311–315.
- Trappe, M., Eberhart, J. & Luoma, D. M. (2000) *Craterellus tubaeformis* (Fr.) Quélet. + *Tsuga heterophylla* (Raf.) Sarg. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 23. Mycologue Publications, Sidney, BC.
- Treu, R. (1990a) Charakterisierung und Identifizierung von Ektomykorrhizen aus dem Nationalpark Berchtesgaden. *Bibliotheca Mycologica* **134**: 1–196.
- Treu, R. (1990b) *Boletinus cavipes*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 35. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990c) *Hebeloma edurum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 39. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990d) *Lactarius alpinus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 40. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990e) *Lactarius badiusanguineus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 41. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990f) *Lactarius porninsis*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 42. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990g) *Laricirhiza alpina*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 50. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990h) *Russula firmula*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 43. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990i) *Russula laricina*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 44. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990j) *Suillus flavus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 45. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990k) *Suillus plorans*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 46. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1990l) *Suillus sibiricus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 47. Einhorn Verlag, Schwäbisch Gmünd.
- Treu, R. (1993) *Suillus laricinus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 81. Einhorn Verlag, Schwäbisch Gmünd.
- Trost, T., Agerer, R., Urbancic, M. & Kraigher, H. (1999) Biodiversity of ectomycorrhizae in a Norway spruce stand on Pokljuka. *Phyton* **39** (4): 225–232.
- Uhl, M. (1988a) Studies on ectomycorrhizae XVI. Ectomycorrhizae formed by *Tricholoma flavobrunneum* and *Betula pendula* and *Tricholoma auratum* and *Pinus sylvestris*. *Mycotaxon* **33**: 1–21.
- Uhl, M. (1988b) *Rhizopogon luteolus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 21. Einhorn Verlag, Schwäbisch Gmünd.
- Uhl, M. (1989) *Tylopilus felleus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 33. Einhorn Verlag, Schwäbisch Gmünd.
- Uhl, M. & Agerer, R. (1987) Studies on ectomycorrhizae XI. Mycorrhizae formed by *Dermocybe crocea* on *Pinus sylvestris* and *Dermocybe palustris* on *Pinus mugo*. *Nova Hedwigia* **45** (3–4): 509–527.
- Uhl, M. & Agerer, R. (1988) *Dermocybe crocea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 14. Einhorn Verlag, Schwäbisch Gmünd.
- Urban, A., Weiss, M. & Bauer, R. (2003) Ectomycorrhizas involving sebacinoid mycobionts. *Mycological Research* **107**: 3–14.
- Ursic, M. & Peterson, R. L. (1997) Morphological and anatomical characterization of ectomycorrhizas and ectendomycorrhizas on *Pinus strobus* seedlings in a southern Ontario nursery. *Canadian Journal of Botany* **75**: 2057–2072.
- Voiry, H. (1981) Classification morphologique des ectomycorhizes du chêne et du hêtre dans le nord-est de la France. *European Journal of Forest Pathology* **11**: 284–299.
- Waller, K. & Agerer, R. (1993) *Scleroderma citrinum*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 80. Einhorn Verlag, Schwäbisch Gmünd.
- Waller, K., Brand, F., Agerer, R. & Taylor, A. (1993) *Piceirhiza oleiferans*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 79. Einhorn Verlag, Schwäbisch Gmünd.
- Watling, R., Taylor, A., See, L. S., Sims, K. & Alexander, I. (1995b) A rainforest *Pisolithus*; its taxonomy and ecology. *Nova Hedwigia* **61**: 417–429.

- Watling, R., Taylor, A. F. S., See, L. S., Sims, K. & Alexander, I. J. (1995a) *Pisolithus aurantioscabrosus*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 85. Einhorn Verlag, Schwäbisch Gmünd.
- Weiss, M. (1989) *Amphinema byssoides*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 23. Einhorn Verlag, Schwäbisch Gmünd.
- Weiss, M. (1991a) Studies on ectomycorrhizae XXXIII. Descriptions of three mycorrhizae synthesized on *Picea abies*. *Mycotaxon* **40**: 53–77.
- Weiss, M. (1991b) *Pisolithus tinctorius*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 63. Einhorn Verlag, Schwäbisch Gmünd.
- Weiss, M. (1992) Mycorrhizae formed by *Pisolithus tinctorius* (Basidiomycetes) on Norway spruce. *Cryptogamic Botany* **2**: 337–344.
- Wiedmer, E. & Senn-Irlet, B. (1998) *Cortinarius pluvius* (Fr.) Fr. + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **3**: 31–36.
- Wiedmer, E. & Senn-Irlet, B. (1999a) *Cortinarius alnobetulae* Kühn. + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **4**: 7–12.
- Wiedmer, E. & Senn-Irlet, B. (1999b) *Cortinarius atropusillus* Favre + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **4**: 13–18.
- Wiedmer, E. & Senn-Irlet, B. (1999c) *Cortinarius badiovestitus* Mos. + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **4**: 19–23.
- Wiedmer, E. & Senn-Irlet, B. (1999d) *Cortinarius kühneri* Mos. + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **4**: 25–29.
- Wiedmer, E. & Senn-Irlet, B. (2001a) *Cortinarius bibulus* Quéf. + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **5**: 23–27.
- Wiedmer, E. & Senn-Irlet, B. (2001b) *Cortinarius helvelloides* (Fr.) Fr. + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **5**: 29–34.
- Wiedmer, E. & Senn-Irlet, B. (2004) *Lactarius lepidotus* Smith & Hesler + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **7–8**: 45–48.
- Wiedmer, E., Senn-Irlet, B. & Agerer, R. (2001) *Alpova diplophloeus* (Zeller & Dodge) Trappe & A. H. Smith + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **5**: 1–8.
- Wiedmer, E., Senn-Irlet, B., Hahn, Ch. & Agerer, R. (2004) *Melanogaster broomeianus* Berk. Ex Tul. + *Alnus viridis* (Chaix) DC. *Descriptions of Ectomycorrhizae* **7–8**: 49–57.
- Wöllecke, J. (2001) *Charakterisierung der Mykorrhizazonosen zweier Kiefernforste unterschiedlicher Trophie*. [Cottbuser Schriften zu Bodenschutz und Rekultivierung Vol. 17.] Brandenburgische Technische Universität Cottbus. Druckzone, Cottbus.
- Wöllecke, J., Münzenberger, B. & Hüttl, R. (1997a) 'Pinirhiza arachnorosea' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **2**: 37–42.
- Wöllecke, J., Münzenberger, B. & Hüttl, R. (1997b) 'Pinirhiza luteoalba' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **2**: 55–60.
- Wöllecke, J., Münzenberger, B. & Hüttl, R. (1998a) 'Pinirhiza rufomaculata' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **3**: 73–78.
- Wöllecke, J., Münzenberger, B. & Hüttl, R. (1998b) 'Pinirhiza sulphurea' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **3**: 79–84.
- Wöllecke, J., Münzenberger, B. & Hüttl, R. (1999a) 'Pinirhiza cephalocystidia' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **4**: 67–72.
- Wöllecke, J., Münzenberger, B. & Hüttl, R. (1999b) 'Pinirhiza hyphocystidia' + *Pinus sylvestris* L. *Descriptions of Ectomycorrhizae* **4**: 85–90.
- Wöllecke, J., Münzenberger, B. & Hüttl, R. F. (1998c) *Pinirhiza arachnorosea*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 125. Einhorn Verlag, Schwäbisch Gmünd.
- Wöllecke, J., Münzenberger, B. & Hüttl, R. F. (1998d) *Pinirhiza rufomaculata*. In *Colour Atlas of Ectomycorrhizae* (R. Agerer, ed.): pl. 129. Einhorn Verlag, Schwäbisch Gmünd.
- Yamada, A. (1998a) *Russula delica* Fr. + *Betula platyphylla* Sukatchev var. *japonica* Hara. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 16. Mycologue Publications, Sidney, BC.
- Yamada, A. (1998b) *Russula nigricans* (Bull.: Fr.) Fr. + *Betula platyphylla* Sukatchev var. *japonica* Hara. In *A Manual of Concise Descriptions of North American Ectomycorrhizae: including microscopic and molecular characterization* (D. M. Goodman, D. M. Durall, J. A. Trofymow & S. Berch, eds): CDE 17. Mycologue Publications, Sidney, BC.
- Yamada, A., Ogura, T. & Ohmasa, M. (2001) Cultivation of mushrooms of edible ectomycorrhizal fungi associated with *Pinus densiflora* by *in vitro* mycorrhizal synthesis. II. Morphology of mycorrhizas in open-pot soil. *Mycorrhiza* **11**: 67–81.
- Zak, B. (1971) Characterization and classification of mycorrhizae of Douglas-fir. II. *Pseudotsuga menziesii* + *Rhizopogon vinicolor*. *Canadian Journal of Botany* **49**: 1079–1084.
- Zak, B. & Larsen, M. J. (1978) Characterization and classification of mycorrhizae of Douglas-fir. III. *Pseudotsuga menziesii* + *Byssospora (Porya) terrestris* vars. *lilacinorosea*, *parksii*, and *sublutea*. *Canadian Journal of Botany* **56**: 1416–1424.
- Zak, J. C. (1973) *Classification of Ectomycorrhizae*. In *Ectomycorrhizae, their Ecology and Physiology* (G. C. Marks & T. T. Kozlowski, eds): 43–78. Academic Press, New York.
- Zambonelli, A., Iotti, M. & Govi, G. (1998) Caratterizzazione anatomo-morfologica delle micorrize in una tartufaia coltivata di *Tuber borchii* Vittad. *Micologia Italiana* **1998** (1): 23–36.
- Zambonelli, A., Iotti, M., Amicucci, A. & Pisi, A. (1999) Caratterizzazione anatomo-morfologica delle micorrize di *Tuber maculatum* Vittad. su *Ostrya carpinifolia*. *Micologia Italiana* **1999** (3): 29–35.
- Zambonelli, A., Salomoni, S. & Pisi, A. (1993) Caratterizzazione anatomo-morfologica delle micorrize di *Tuber* spp. su *Quercus pubescens* Willd. *Micologia Italiana* **1993** (3): 73–90.
- Zambonelli, A., Salomoni, S. & Pisi, A. (1995) Caratterizzazione anatomo-morfologica delle micorrize di *Tuber borchii*, *Tuber aestivum*, *Tuber mesentericum*, *Tuber brumale*, *Tuber melanosporum* su *Pinus pinea*. *Micologia Italiana* **1995** (2): 119–137.
- Zambonelli, A., Tibiletti, E. & Pisi, A. (1997) Caratterizzazione anatomo-morfologica delle micorrize di *Tuber indicum* Cooke & Masee su *Pinus pinea* L. e *Quercus cerris* L. *Micologia Italiana* **1997** (1): 29–36.

Corresponding Editor: J. W. G. Cairney