

Appendix 1: Ectomycorrhizal species registered in ponderosa pine native forests..

Species	references	comments
<i>Alpova trapei</i> Fogel *	(1)	
<i>Amanita caesarea</i> (Scop.) Pers.	(3) (10)	
<i>Amanita muscaria</i> (L.) Hook.	(2) (3)	
<i>Amanita crocea</i> (Quél.) Singer	(10)	
<i>Amanita gemmata</i> (Fr.) Bertillon	(10)	
<i>Amanita muscaria</i> (L.) Hook.	(10)	
<i>Amanita pantherina</i> (DC.) Krombh	(2) (10)	
<i>Amanita pantherina-gemmata</i> hybrid	(3)	
<i>Amanita phalloides</i> Fr.	(1)	
<i>Amanita porphyria</i> Fr.	(1)	
<i>Amanita rubescens</i> (Pers.) Gray	(3)	
<i>Amanita vaginata</i> (Bull.) Vittad.	(2) (10)	
<i>Amphinema byssoides</i> (Pers.) J. Erikss.	(7)	
<i>Balsamia</i> cf. <i>nigrescens</i> Harkn.	(1)	
<i>Balsamia magnata</i> Harkn.	(1) (5)	
<i>Balsamia platyspora</i> Berk.	(1)	
<i>Balsamia vulgaris</i> Vittad.	(1)	
<i>Barssia oregonensis</i> Gilkey	(1)	
<i>Boletus barrowsii</i> Thiers & A.H. Sm.	(3) (10)	
<i>Boletus edulis</i> Bull.	(2) (3)	
<i>Brauniellula albipes</i> (Zeller) A.H. Sm. & Singer	(1) (5)	
<i>Brauniellula nancyae</i> A.H. Sm. & Singer	(9)	
<i>Camarophyllus borealis</i> (Peck) Murrill	(1)	
<i>Camarophyllus</i> cf. <i>virgineus</i> (Wulfen) P. Kumm	(1)	
<i>Cantharellus formosus</i> Corner	(1)	
<i>Cantharellus subalbidus</i> A.H. Sm. & Morse	(1)	
<i>Cenococcum geophilum</i> Fr.	(1) (4)	
<i>Cenococcum graniforme</i> (Sowerby) Ferd. & Winge	(2)	
<i>Choiromyces alveolatus</i> (Harkn.) Trappe	(1)	
<i>Chroogomphus rutilus</i> (Schaeff.) O.K. Mill.	(1)	
<i>Chroogomphus vinicolor</i> (Peck) O. K. Miller	(1) (3)	
<i>Clavariadelphus borealis</i> V.L. Wells & Kempton	(3)	
<i>Clavariadelphus truncates</i> (Quél.) Donk	(3)	
<i>Clavulina cinerea</i> (Bull.) J. Schröt.	(1)	
<i>Clavulina cristata</i> (Holmsk.) J. Schröt.	(3)	
<i>Clavulinopsis fusiformis</i> (Sowerby) Corner	(1)	
<i>Cortinarius bigelowii</i> Thiers & A.H. Sm.	(1)	
<i>Cortinarius cinnamomeus</i> (L.) Fr.	(1)	
<i>Cortinarius croceifolius</i> Peck	(2)	
<i>Cortinarius glaucopus</i> (Schaeff.) Fr.	(10)	
<i>Cortinarius infractus</i> Berk.	(1)	
<i>Cortinarius magnivelatus</i> Dearn. ex Fogel	(1)	
<i>Cortinarius metarius</i> Kauffman	(10)	
<i>Cortinarius scandens</i> Fries	(1)	
<i>Cortinarius scaurus</i> (Fr.) Fr.	(10)	
<i>Dentinum</i> sp.	(1)	
<i>Dermocybe humboldtensis</i> (Ammirati & A.H. Sm.) Ammirati	(1)	Cortinariaceae; genus with several non mycorrhizal species

<i>Destuntzia fusca</i> Fogel & Trappe	(1)	
<i>Elaphomyces anthracinus</i> Vittad.	(1)	
<i>Elaphomyces granulatus</i> Fr.	(1) (5)	
<i>Endogone flammicorona</i> Trappe & Gerdemann	(1)	
<i>Endogone lactiflua</i> Berk. & Broome	(1) (5)	
<i>Gautieria caudata</i> (Harkn.) Zeller & C.W.	(1)	
Dodge		
<i>Gautieria</i> cf. <i>crispa</i> Stewart & Trappe	(1) (3) (6) (9)	
<i>Gautieria graveolens</i> Vittad. *	(1)	
<i>Gautieria mexicana</i> (Fischer) Zeller & Dodge*	(1)	
<i>Gautieria monticola</i> Harkn	(1)	
<i>Gautieria morchelliformis</i> Vittad.*	(1)	
<i>Gautieria otthii</i> Trog	(1)	
<i>Gautieria parksiana</i> Zeller & Dodge*	(1)	
<i>Genabea cerebriformis</i> (Harkn.) Trappe	(1)	
<i>Genea asperula</i> Trappe Guzmán & Herrera *	(1)	
<i>Genea intermedia</i> Gilkey	(1)	
<i>Geopora cooperi</i> f. <i>cooperi</i> Harkn.	(1) (3)	
<i>Geopora cooperi</i> f. <i>gilkeyae</i> Burdsall	(1) (5)	
<i>Gomphidius rutilus</i> (Schaeff.) S. Lundell	(2)	
<i>Gomphidius vinicolor</i> Peck	(2)	
<i>Gyromitra infula</i> (Schaeff.) Quél.	(3)	
<i>Hebeloma crustuliniforme</i> (Bull.:Fr.)	(1) (3)	
<i>Hebeloma pusillum</i> M. Lange	(1)	
<i>Helvella crispa</i> (Scop.) Fr.	(10)	
<i>Helvella lacunosa</i> Afzel.	(1)	
<i>Helvella leucomeleana</i> (Pers.) Nannf.	(1)	
<i>Hydnellum peckii</i> Banker *	(1)	
<i>Hydnotrya cerebriformis</i> (Tul.) Harkn	(1)	
<i>Hydnotrya variiformis</i> Gilkey*	(1)	
<i>Hydnotryopsis setchellii</i> Gilkey*	(1)	
<i>Hydnum imbricatum</i> var. <i>monticola</i> Harrison*	(1)	
<i>Hygrocybe virginea</i> (Wulf.: Fr.) Orton & Wathing*	(1)	
<i>Hygrophorus chrysodon</i> (Batsch) Fr.	(3) (10)	genus with several non
<i>Hygrophorus erubescens</i> (Fr.) Fr.	(3)	mycorrhizal species.
<i>Hygrophorus gliocyclus</i> Fr	(1) (2)	
<i>Hygrophorus karstenii</i> Sacc. & Cub.	(2)	
<i>Hygrophorus speciosus</i> Peck	(3) (10)	
<i>Hymenogaster brunnescens</i> Smith	(9)	
<i>Hymenogaster gilkeyae</i> Zeller & Dodge*	(1)	
<i>Hymenogaster hiemalis</i> sp.nov.(in herb.) *	(1)	not included.
<i>Hymenogaster mcmurphyi</i> Zeller & Dodge	(1)	
<i>Hymenogaster subalpinus</i> A.H. Sm.	(9)	
<i>Hymenogaster sublilacinus</i> A. H. Sm.	(1) (5)	
<i>Hysterangium coriaceum</i> Hesse	(1) (3) (5)	
<i>Hysterangium crassirhachis</i> Zeller & Dodge	(1)	
<i>Hysterangium fallax</i> Castellano sp. nov. (in herb.)	(1)	not included.
<i>Hysterangium ochraceisporus</i> Castellano & States	(1)	not included.
<i>Hysterangium separabile</i> Zeller	(1) (6) (9)	
<i>Hysterangium setchellii</i> Fischer	(1)	not included.
<i>Inocybe fastigiata</i> (Schaeff.) Quél.	(3)	
<i>Inocybe geophylla</i> var. <i>lilacina</i> Gillet	(3)	

<i>Inocybe lacera</i> (Fr.) P. Kumm.	(1)	
<i>Laccaria amethysteo-occidentalis</i> G. Mueller	(1) (4)	
<i>Laccaria laccata</i> (Scop.) Fr.	(2) (3)	
<i>Lactarius alnicola</i> A.H. Sm.	(10)	
<i>Lactarius barrowsii</i> Hesler & A.H. Sm.	(3)	
<i>Lactarius chelidonium</i> Peck	(3)	
<i>Lactarius deliciosus</i> (L.) Fr.	(1) (3) (10)	
<i>Lactarius indigo</i> (Schwein.) Fr.	(3)	
<i>Lactarius loculentus</i> Burl.	(4)	
<i>Lactarius rubrilacteus</i> Hesler. & Smith	(1) (3)	
<i>Lactarius subviscidus</i> Hesler & A.H. Sm. *	(1)	
<i>Lactarius uvidus</i> (Fr.) Fr.	(10)	
<i>Leucogaster rubescens</i> Zeller & Dodge	(1) (9)	
<i>Leucopaxillus amarus</i> (Alb. & Schwein.) Kühner *	(1)	
<i>Leucophelps spinispora</i> Fogel *	(1)	not included.
<i>Macowanites</i> sp.	(1)	
<i>Martellia</i> sp.	(4)	
<i>Martellia ellipsospora</i> (Zeller) Singer & A.H. Sm.	(1) (5) (9)	
<i>Martellia brunnescens</i> Singer & A.H. Sm. *	(1)	
<i>Martellia</i> cf. <i>parksii</i> Singer & A.H. Sm. *	(1)	
<i>Martellia fulvispora</i> A.H. Sm.	(1)	
<i>Martellia subochracea</i> A.H. Sm. *	(1)	
<i>Melanogaster californicus</i> Wang, Castellano & Trappe*	(1)	not included.
<i>Melanogaster euryspermum</i> (Zeller & Dodge) Zeller	(1) (5) (9)	
<i>Melanogaster trappei</i> I.P.S. Thind & B.M. Sharma *	(1)	
<i>Melanogaster tuberiformis</i> Corda	(1) (5) (9)	
<i>Melanogaster variegatus</i> (Vittad.) Tul.	(1)	
<i>Mycolevis siccigleba</i> A.H. Sm. *	(1)	
<i>Octavianina</i> sp.	(1)	
<i>Paxillus involutus</i> (Batsch:Fr.) Fries	(1)	
<i>Phylloporus rhodoxanthus</i> (Schwein.) Bres.	(1)	
<i>Pisolithus tinctorius</i> (Pers.) Coker & Couch	(1)	
<i>Pyrenogaster atroleba</i> (Zeller) L.S. Domínguez & Castellano *	(1)	
<i>Pyrenogaster pityophilus</i> Malençon & Rioussat	(1)	
<i>Radiigera taylorii</i> Zeller*	(1)	
<i>Ramaria myceliosa</i> (Peck) Corner	(1)	
<i>Rhizopogon abietis</i> A.H. Sm.	(1)	
<i>Rhizopogon atroviolaceus</i> A.H. Sm.	(1)	
<i>Rhizopogon brunnescens</i> Zeller*	(1)	
<i>Rhizopogon</i> cf. <i>arctostaphyli</i> * A.H. Sm.	(1)	
<i>Rhizopogon</i> cf. <i>rudus</i> A.H. Sm.*	(1)	
<i>Rhizopogon cinerascens</i> A.H. Sm. *	(1)	
<i>Rhizopogon clavitisorus</i> A.H. Sm. *	(1)	
<i>Rhizopogon cusickiensis</i> A.H. Sm. *	(1)	
<i>Rhizopogon ellenae</i> A.H. Sm.	(1)	
<i>Rhizopogon ellipsosporus</i> Trappe, Castellano & Amar.*	(1)	
<i>Rhizopogon evadens</i> A.H. Sm.	(1) (3) (5) (6) (9)	
<i>Rhizopogon flavofibrillosus</i> A.H. Sm.*	(1)	

Rhizopogon fuscorubens A.H. Sm.	(1)	
Rhizopogon hawkeriae A.H. Sm.*	(1)	
Rhizopogon idahoensis A.H. Sm.*	(1)	
Rhizopogon luteolus Fr.*	(1)	
Rhizopogon mutabilis A.H. Sm.	(1)	
Rhizopogon occidentalis Zeller & Dodge	(1)	
Rhizopogon ochraceorubens A.H. Sm.	(1) (3) (5) (6) (9)	
Rhizopogon parksii A.H. Sm.*	(1)	
Rhizopogon pedicellus A.H. Sm.*	(1)	
Rhizopogon rogersii A.H. Sm.*	(1)	
Rhizopogon rubescens (Tul. & C. Tul.) Tul. & C. Tul.	(1)	
Rhizopogon salebrosus A.H. Sm.*	(1)	
Rhizopogon semireticulatus A.H. Sm.	(1)	
Rhizopogon smithii Hosford	(1)	
Rhizopogon subareolatus A.H. Sm.*	(1)	
Rhizopogon subcaerulescens A.H. Sm.	(1) (3) (4) (5) (6) (9)	
Rhizopogon subgelatinosus A.H. Sm.	(1)	
Rhizopogon sublateritius A.H. Sm.	(1)	
Rhizopogon subradicatus A.H. Sm.	(1)	
Rhizopogon subsalmonius A.H. Sm.	(1)	
Rhizopogon tephrogleba K.A. Harrison & A.H. Sm.	(1)	
Rhizopogon truncatus Linder	(1)	
Rhizopogon variabilisporus A.H. Sm.*	(1)	
Rhizopogon versisporus Hosford nom. prov *	(1)	not included.
Rhizopogon villescens A. H. Sm.*	(1)	
Rhizopogon villosulus Zeller	(1)	
Rhizopogon vinicolor A. H. Sm.	(1)	
Rhizopogon vulgaris (Vitt.) M	(1)	
Rhizopogon zelleri A.H. Sm.*	(1)	
Russula alutacea (Fr.) Fr.	(3) (10)	
Russula brevipes Peck	(3) (10)	
Russula claroflava Knudsen & T. Borgen	(10)	
Russula delica Fr.	(2)	
Russula densiflora	(10)	not included.
Russula emética (Schaeff.) Pers.	(10)	
Russula maculata Quél. & Roze group	(3)	
Russula murrillii Burl.	(4)	
Russula rosacea (Pers.) Fr.	(3) (10)	
Russula sanguinea Fr.*	(1)	
Russula sororia Fr.*	(1)	
Russula subnigricans Hongo	(10)	
Russula xeramphelina (Schaeff.) Fr.	(10)	
Sarcosphaera coronaria (Jacq.) Boud.*	(1)	
Sarcosphaera eximia (Durieu & Lév.) Maire *	(1)	
Scleroderma bovista Fr*	(1)	
Scleroderma fuscum (Corda) Fischer	(1)	
Scleroderma hypogaeum Zeller	(1)	
Sclerogaster columellatus (Zeller) Fogel*	(1)	
Sclerogaster pacificus Zeller & Dodge*	(1)	
Sclerogaster xerophilus Fogel	(1) (3) (5) (6) (9)	
Sedecula pulvinata Zeller	(1) (9)	
Sparassis crispa (Wulfen) Fr.	(3)	

Suillus albidipes (Peck) Singer	(1)	
Suillus borealis A.H. Sm., Thiers & O.K. Mill.	(1)	
Suillus brevipes (Peck) Kuntze *	(1) (10)	
Suillus glandulosipes Thiers & A.H. Sm.	(1)	
Suillus granulatus (L.) Snell	(1) (2) (3) (10)	
Suillus kaibabensis Thiers	(3)	
Suillus lakei (Murrill) A.H. Sm. & Thiers *	(1)	
Suillus luteus (L.) Gray	(1) (2)	
Suillus piperatus (Bull.) Kuntze	(2)	
Suillus pseudobrevipes A.H. Sm. & Thiers	(1) (10)	
Suillus tomentosus (Kauffman) Singer	(1) (2)	
Suillus volcanolis Thiers	(1)	
Terfezia cf. gigantea *	(1)	
Thelephora americana Lloyd (plantines)	(1)	
Tomentella sublilacina	(4)	
Trappea darkeri (Zeller) Castellano *	(1) (5)	
Trappea phillipsii (Harkness) Castellano *	(1)	
Tricholoma flavovirens (Fr.) Lund	(1)	
Tricholoma pardinum Quelet	(1)	
Tricholoma zelleri (D.E. Stuntz & A.H. Sm.)	(3)	
Ovrebo & Tylutki		
Tricholomopsis rutilans (Schaeff.) Singer	(3)	genus with several non mycorrhizal species.
Truncocolumella citrina Zeller*	(1)	
Tuber asa Lesp.	(1)	
Tuber californicum Harkn.	(1)	
Tuber gibbosum Harkn.*	(1)	
Tuber giganteum Gilkey*	(1)	
Tuber levissimum Gilkey	(5)	
Tuber rufum var. rufum Pico	(1)	
Tuber sphaerosporum Gilkey*	(1)	
Zelleromyces sp. nov. in herb.*	(1)	

References: "Not included" means it is not included in the data base "Index Fungorum" from CABI Bioscience y CBS, available on Internet (<http://www.indexfungorum.org/Index.htm>). *: Species found only in mixed forests. (1) Herbarium data base, Department of Forest Science, Oregon State University, Corvallis, Oregon, Estados Unidos (OSC).; (2) Trappe 1962; (3) States com. pers. (4) Stendell et al. 1999; (5) States & Gaud 1997; (6) States 1984a; (7) Gilbertson 1974; (8) Melichar et al. 1985; (9) States 1984b, (10) Mathiasen & Albion 2001.

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