

Table 1 Interface structures in predominantly beneficial root-fungal associations categorized by symbiosis type and partner taxa.

Symbiosis	Plant Taxa	Fungal Taxa	Interface Structures	Intracellular Hyphae	Fungal Sheath
Arbuscular Mycorrhiza (AM)	Bryophytes, Pteridophytes, Angiosperms, Gymnosperms	Mucoromycota: Glomeromycotina	Arbuscules	+	-
Fine Root Endophytes (FRE)	Angiosperms*	Mucoromycota: Mucoromycotina	Arbuscules	+	-
Ectomycorrhiza (ECM)	Angiosperms, Gymnosperms	Basidiomycota, Ascomycota, Mucoromycota	Hartig net	-	+
Ectendomycorrhiza (EEM)	Angiosperms, Gymnosperms	Basidiomycota, Ascomycota, Mucoromycota	Hartig net & Hyphal coils	+	+/-
Arbutoid Mycorrhiza (ABM)	Ericales: <i>Ericaceae</i> , <i>Pyrolaceae</i>	Basidiomycota	Hartig net & Hyphal coils	+	+/-
Monotropoid Mycorrhiza (MTM)	Ericales: <i>Ericaceae</i>	Basidiomycota	Hartig net & Fungal peg	-	+
Orchid mycorrhiza (OM)	Asparagales: <i>Orchidaceae</i>	Basidiomycota, Ascomycota	Hyphal coils (Pelotons)	+	-
Ericoid Mycorrhiza (ERM)	Ericales: <i>Ericaceae</i>	Ascomycota, Basidiomycota: Sebaciniales	Hyphal coils	+	-
Sheathed Ericoid Mycorrhiza (SERM)	Ericales: <i>Ericaceae</i>	Basidiomycota	Hyphal coils	+	+
Sebacinalean Endophytes (SE)	Bryophytes, Pteridophytes, Angiosperms, Gymnosperms	Basidiomycota	Hyphal coils	+	-
Dark Septate Endophytes (DSE)	Angiosperms, Gymnosperms,	Ascomycota	Hyphae & Microsclerotia	+	-
Fire-Associated Mutualism (FAM)¹	Angiosperms: <i>Poaceae</i> *	Ascomycota	Unknown	Unknown	-
Feremycorrhiza (FM)	Angiosperms:* <i>Myrtaceae</i>	Basidiomycota	Absent	No root colonization	-

¹Root colonization features need to be clarified.

*The host plant range needs to be investigated.