

Table 6.1 Genera reported to contain at least one species on which ectomycorrhiza has been described.

Family	Genus	Family	Genus
Aceraceae	B <i>Acer</i>	Hammamelidaceae	<i>Parrotia</i>
Betulaceae	B <i>Alnus</i>	Juglandaceae	B <i>Carya</i>
	B <i>Betula</i>		B <i>Juglans</i>
	B <i>Carpinus</i>		<i>Pterocarya</i>
	B <i>Corylus</i>	Caesalpinoideae	<i>Afzelia</i>
	B <i>Ostrya</i>		<i>Aldina</i>
	B <i>Ostryopsis</i>		<i>Anthonota</i>
Bignoniaceae	<i>Jacaranda</i>		<i>Bauhinia</i>
Caprifoliaceae	B <i>Sambucus</i>		<i>Brachystegia</i>
Casuarinaceae	B <i>Casuarina</i>		<i>Cassia</i>
	B <i>Allocasuarina</i>		<i>Eperua</i>
Cistaceae	B <i>Helianthemum</i>		<i>Gilbertiodendron</i>
	B <i>Cistus</i>		<i>Julbernardia</i>
Compositae	B <i>Lactuca*</i> (<i>Mycelis</i>)		<i>Monopetalanthus</i>
Cyperaceae	B <i>Kobresia*</i>		<i>Paramacrolobium</i>
Dipterocarpaceae	B <i>Anisoptera</i>		<i>Swartzia</i>
	B <i>Balanocarpus</i>	Mimosoideae	<i>Acacia</i>
	B <i>Cotylelobium</i>	Papilionoideae	<i>Brachysema</i>
	B <i>Dipterocarpus</i>		<i>Chorizema</i>
	B <i>Dryobalanops</i>		<i>Daviesia</i>
	B <i>Hopea</i>		<i>Dillwynia</i>
	B <i>Monotes</i>		<i>Eutaxia</i>
	B <i>Shorea</i>		B <i>Gompholobium</i>
	B <i>Valica</i>		B <i>Hardenbergia</i>
Elaeagnaceae	<i>Shepherdia</i>		<i>Jacksonia</i>
Epacridaceae	<i>Astroloma</i>		<i>Kennedyia</i>
Ericaceae	<i>Arbutus</i>		B <i>Mirbelia</i>
	<i>Arctostaphylos</i>		B <i>Oxylobium</i>
	<i>Chimaphila</i>		<i>Platylobium</i>
	<i>Gaultheria</i>		<i>Pultenaea</i>
	<i>Kalmia</i>		B <i>Robinia</i>
	<i>Ledum</i>		B <i>Vicia</i>
	<i>Leucothoe</i>		B <i>Viminaria</i>
	<i>Rhododendron</i>	Myricaceae	<i>Comptonia</i>
	<i>Vaccinium</i>		<i>Myrica</i>
Euphorbiaceae	<i>Paranthera</i>	Myrtaceae	B <i>Angophora</i>
	B <i>Uapaca</i>		B <i>Callistemon</i>
Fagaceae	B <i>Castanea</i>		B <i>Campomanesia</i>
	B <i>Castanopsis</i>		B <i>Eucalyptus</i>
	B <i>Fagus</i>		B <i>Leptospermum</i>
	B <i>Lithocarpus</i>		B <i>Melaleuca</i>
	B <i>Nothofagus</i>		B <i>Tristania</i>
	B <i>Pasania</i>	Nyctaginaceae	B <i>Neea</i>
	B <i>Quercus</i>		B <i>Torrubia</i>
	B <i>Trigonobalus</i>		B <i>Pisonia</i>
Gentianaceae	<i>Bartonia</i>	Oleaceae	B <i>Fraxinus</i>
Goodenaceae	<i>Brunonia*</i>	Platanaceae	B <i>Platanus</i>
	B <i>Goodenia*</i>	Polygalaceae	B <i>Comeosperma</i>

(Continued)

Table 6.1 (Continued)

Family	Genus	Family	Genus
Polygonaceae	<i>Coccoloba</i>	Sterculiaceae	B <i>Lasiopetalum</i>
	<i>Polygonum</i> *		<i>Thomasia</i>
Rhamnaceae	<i>Cryptandra</i>	Stylidiaceae	B <i>Stylidium</i>
	<i>Pomaderris</i>	Thymeliaceae	B <i>Pimelia</i>
	<i>Rhamnus</i>	Tiliaceae	B <i>Tilia</i>
	<i>Spyridium</i>	Ulmaceae	B <i>Ulmus</i>
	<i>Trymalium</i>		<i>Celtis</i>
Rosaceae	<i>Chaembatia</i>	Vitaceae	B <i>Vitis</i>
	<i>Cirocarpus</i>	Cupresseceae	B <i>Cupressus</i>
	B <i>Crataegus</i>		B <i>Juniperus</i>
	B <i>Dryas</i>	Pinaceae	<i>Abies</i>
	B <i>Malus</i>		<i>Cathaya</i>
	B <i>Prunus</i>		B <i>Cedrus</i>
	B <i>Pyrus</i>		<i>Keteleeria</i>
	B <i>Rosa</i>		<i>Larix</i>
	B <i>Sorbus</i>		<i>Picea</i>
Salicaceae	B <i>Populus</i>		<i>Pinus</i>
	B <i>Salix</i>		<i>Pseudolarix</i>
Sapindaceae	<i>Allophylus</i>		<i>Pseudotsuga</i>
	<i>Nephelium</i>		<i>Tsuga</i>
Sapotaceae	<i>Glycoxylon</i>	Gnetaceae	<i>Gnetum</i>

Modified from Harley and Smith (1983). This list cannot pretend to be exhaustive but illustrates the wide range of families and genera of Angiospermae and Gymnospermae in which ectomycorrhizas have been observed. A record of the presence of ectomycorrhizal individuals in a genus does not mean that all species are or may be ectomycorrhizal, nor does it mean ectomycorrhizal colonization is necessarily consistently or even normally present in any species of that genus. Those marked * are herbaceous and those marked B may form both ecto- and arbuscular mycorrhizas, with the latter in many cases being the most common mycorrhizal type observed.

rainforests of the Guineo-Congolan basin (Newbery *et al.*, 1988) (see Chapters 15 and 16). Woodlands of the miombo type formed by the prominent caesalpinoid ECM genera *Brachystegia* and *Isoberlinia* cover vast areas of dry savannahs of East and South-Central Africa (Högberg, 1982; Högberg and Pearce, 1986; Alexander and Högberg, 1986; Alexander, 1989a; Taylor and Alexander, 2005).

In contrast to the Caesalpinoideae, the subfamilies Mimosoideae and Papilionoideae appear, with a very few exceptions that need to be confirmed, to be made up of AM species. There are reports of ECM colonization in species such as *Acacia* (Mimosoideae) (Warcup, 1985; McGee, 1986) even though neither typical Hartig net nor mantle development is present. Again, since this genus is more widely associated with AM fungi, there seems little to be gained by classifying them as ECM.

Some genera of shrubs and a very small number of herbaceous species of angiosperm are routinely found to be ECM. Of these, the shrubs *Dryas* (Rosaceae) and *Helianthemum* (Cistaceae) are of particular ecological significance. Among the herbaceous species, the dicotyledenous herb *Polygonum viviparum* and the cyperaceous monocot *Kobresia myosuroides* have typical ECM short roots with sheath and Hartig net. Neither of these plants would normally be colonized by AM fungi.

One further category of woody plants is of interest because it shows the facultative ability to be both AM and ECM. Members of the Myrtaceae (Lapeyrie and Chilvers,