

Supplementary Material

Elevational Patterns of Tree Species Richness and Forest Biomass on Two Subtropical Mountains in China

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Table S1 Mycorrhizal types of the tree species on Mt. Wuyishan and Mt. Gonggashan. Abbreviations: AM, arbuscular mycorrhizae; EcM, ectomycorrhizae; ErM, ericoid mycorrhizae

Species	Family	Genus	Mycorrhizal type
<i>Abies fabri</i>	Pinaceae	Abies	EcM
<i>Acer amplum</i>	Aceraceae	Acer	AM
<i>Acer buergerianum</i>	Aceraceae	Acer	AM
<i>Acer cappadocicum</i>	Aceraceae	Acer	AM
<i>Acer davidii</i>	Aceraceae	Acer	AM
<i>Acer forrestii</i>	Aceraceae	Acer	AM
<i>Acer laxiflorum</i>	Aceraceae	Acer	AM
<i>Acer macrophyllum</i>	Aceraceae	Acer	AM
<i>Acer oliverianum</i>	Aceraceae	Acer	AM
<i>Acer pectinatum</i>	Aceraceae	Acer	AM
<i>Acer pubinerve</i>	Aceraceae	Acer	AM
<i>Acer cappadocicum</i>	Aceraceae	Acer	AM
<i>Acer caudatum</i>	Aceraceae	Acer	AM
<i>Acer tataricum</i>	Aceraceae	Acer	AM
<i>Acer</i> sp.	Aceraceae	Acer	AM
<i>Acer</i> sp1	Aceraceae	Acer	AM
<i>Acer</i> sp2	Aceraceae	Acer	AM
<i>Alangium chinense</i>	Alangiaceae	Alangium	AM
<i>Aleurites montana</i>	Euphorbiaceae	Aleurites	AM
<i>Alniphyllum fortunei</i>	Styracaceae	Alniphyllum	AM
<i>Alnus nepalensis</i>	Betulaceae	Alnus	AM

<i>Altingia gracilipes</i>	Hamamelidaceae	Altingia	AM
<i>Aralia chinensis</i>	Araliaceae	Aralia	AM
<i>Berberis</i> sp.	Berberidaceae	Berberis	AM
<i>Berberis</i> sp1	Berberidaceae	Berberis	AM
<i>Berberis sieboldii</i>	Berberidaceae	Berberis	AM
<i>Betula</i> sp.	Betulaceae	Betula	EcM
<i>Betula</i> sp1	Betulaceae	Betula	EcM
<i>Betula</i> sp2	Betulaceae	Betula	EcM
<i>Betula luminifera</i>	Betulaceae	Betula	EcM
<i>Betula utilis</i>	Betulaceae	Betula	EcM
<i>Camellia</i> sp.	Theaceae	Camellia	AM
<i>Camellia chekiangoleosa</i>	Theaceae	Camellia	AM
<i>Camellia cuspidata</i>	Theaceae	Camellia	AM
<i>Camellia japonica</i>	Theaceae	Camellia	AM
<i>Carpinus londoniana</i>	Betulaceae	Carpinus	EcM
<i>Castanopsis eyrei</i>	Fagaceae	Castanopsis	EcM
<i>Castanopsis faberi</i>	Fagaceae	Castanopsis	EcM
<i>Castanopsis fargesii</i>	Fagaceae	Castanopsis	EcM
<i>Castanopsis megaphylla</i>	Fagaceae	Castanopsis	EcM
<i>Castanopsis orthacantha</i>	Fagaceae	Castanopsis	EcM
<i>Castanopsis sclerophylla</i>	Fagaceae	Castanopsis	EcM
<i>Celastrus orbiculatus</i>	Celastraceae	Celastrus	AM
<i>Cerasus</i> sp.	Rosaceae	Cerasus	AM
<i>Cerasus</i> sp1	Rosaceae	Cerasus	AM
<i>Cerasus dielsiana</i>	Rosaceae	Cerasus	AM
<i>Cerasus schneideriana</i>	Rosaceae	Cerasus	AM
<i>Cerasus serrulata</i>	Rosaceae	Cerasus	AM
<i>Choerospondias axillaris</i>	Anacardiaceae	Choerospondias	AM
<i>Cinnamomum</i> sp.	Lauraceae	Cinnamomum	AM
<i>Cinnamomum</i> sp1	Lauraceae	Cinnamomum	AM
<i>Cinnamomum</i> sp2	Lauraceae	Cinnamomum	AM
<i>Cinnamomum camphora</i>	Lauraceae	Cinnamomum	AM
<i>Clematoclethra lasioclada</i>	Actinidiaceae	Clematoclethra	AM
<i>Clethra delavayi</i>	Clethraceae	Clethra	AM
<i>Cleyera</i> sp.	Theaceae	Cleyera	AM
<i>Cleyera</i> sp1	Theaceae	Cleyera	AM
<i>Cornus kousa</i>	Cornaceae	Cornus	AM
<i>Corylus ferox</i>	Betulaceae	Corylus	EcM
<i>Corylus heterophylla</i>	Betulaceae	Corylus	EcM
<i>Cotoneaster</i> sp.	Rosaceae	Cotoneaster	AM
<i>Cunninghamia lanceolata</i>	Taxodiaceae	Cunninghamia	AM
<i>Cyclobalanopsis</i> sp.	Fagaceae	Cyclobalanopsis	EcM
<i>Cyclobalanopsis augustinii</i>	Fagaceae	Cyclobalanopsis	EcM
<i>Cyclobalanopsis glauca</i>	Fagaceae	Cyclobalanopsis	EcM

<i>Cyclobalanopsis jenseniana</i>	Fagaceae	Cyclobalanopsis	EcM
<i>Cyclobalanopsis multinervis</i>	Fagaceae	Cyclobalanopsis	EcM
<i>Cyclobalanopsis myrsinifolia</i>	Fagaceae	Cyclobalanopsis	EcM
<i>Cyclobalanopsis pachyloma</i>	Fagaceae	Cyclobalanopsis	EcM
<i>Dalbergia hupeana</i>	Leguminosae	Dalbergia	AM
<i>Daphne bholua</i>	Thymelaeaceae	Daphne	AM
<i>Daphniphyllum</i> sp.	Daphniphyllaceae	Daphniphyllum	AM
<i>Daphniphyllum oldhami</i>	Daphniphyllaceae	Daphniphyllum	AM
<i>Dendropanax dentiger</i>	Araliaceae	Dendropanax	AM
<i>Diospyros</i> sp.	Ebenaceae	Diospyros	AM
<i>Diospyros eriantha</i>	Ebenaceae	Diospyros	AM
<i>Diospyros morrisiana</i>	Ebenaceae	Diospyros	AM
<i>Elaeagnus pungens</i>	Elaeagnaceae	Elaeagnus	EcM
<i>Elaeocarpus chinensis</i>	Elaeocarpaceae	Elaeocarpus	AM
<i>Elaeocarpus glabripetalus</i>	Elaeocarpaceae	Elaeocarpus	AM
<i>Eleutherococcus</i> sp.	Araliaceae	Eleutherococcus	AM
<i>Emmenopterys henryi</i>	Rubiaceae	Emmenopterys	AM
<i>Engelhardia fenzelii</i>	Juglandaceae	Engelhardia	EcM
<i>Enkianthus chinensis</i>	Ericaceae	Enkianthus	AM
<i>Enkianthus quinqueflorus</i>	Ericaceae	Enkianthus	AM
<i>Erythroxylum kunthianum</i>	Erythroxylaceae	Erythroxylum	AM
<i>Euonymus alatus</i>	Celastraceae	Euonymus	AM
<i>Euonymus clivicola</i>	Celastraceae	Euonymus	AM
<i>Eurya hebeclados</i>	Theaceae	Eurya	AM
<i>Eurya japonica</i>	Theaceae	Eurya	AM
<i>Eurya loquiana</i>	Theaceae	Eurya	AM
<i>Eurya metcalfiana</i>	Theaceae	Eurya	AM
<i>Eurya muricata</i>	Theaceae	Eurya	AM
<i>Eurya rubiginosa</i>	Theaceae	Eurya	AM
<i>Fagus longipetiolata</i>	Fagaceae	Fagus	EcM
<i>Fraxinus retusa</i>	Oleaceae	Fraxinus	AM
<i>Halesia macgregorii</i>	Styracaceae	Halesia	AM
<i>Hydrangea macrophylla</i>	Saxifragaceae	Hydrangea	AM
<i>Hydrangea paniculata</i>	Saxifragaceae	Hydrangea	AM
<i>Ilex</i> sp.	Aquifoliaceae	Ilex	AM
<i>Ilex</i> sp1	Aquifoliaceae	Ilex	AM
<i>Ilex asprella</i>	Aquifoliaceae	Ilex	AM
<i>Ilex chinensis</i>	Aquifoliaceae	Ilex	AM
<i>Ilex delavayi</i>	Aquifoliaceae	Ilex	AM
<i>Ilex editicostata</i>	Aquifoliaceae	Ilex	AM
<i>Ilex ficoidea</i>	Aquifoliaceae	Ilex	AM
<i>Ilex formosana</i>	Aquifoliaceae	Ilex	AM
<i>Ilex latifolia</i>	Aquifoliaceae	Ilex	AM
<i>Ilex litseifolia</i>	Aquifoliaceae	Ilex	AM

<i>Ilex memecylifolia</i>	Aquifoliaceae	Ilex	AM
<i>Ilex pedunculosa</i>	Aquifoliaceae	Ilex	AM
<i>Ilex rotunda</i>	Aquifoliaceae	Ilex	AM
<i>Ilex</i> sp2	Aquifoliaceae	Ilex	AM
<i>Ilex wilsonii</i>	Aquifoliaceae	Ilex	AM
<i>Illicium</i> sp.	Illiciaceae	Illicium	AM
<i>Illicium simonsii</i>	Illiciaceae	Illicium	AM
<i>Itea chinensis</i>	Saxifragaceae	Itea	AM
<i>Koelreuteria paniculata</i>	Sapindaceae	Koelreuteria	AM
<i>Lindera</i> sp.	Lauraceae	Lindera	AM
<i>Lindera angustifolia</i>	Lauraceae	Lindera	AM
<i>Lindera erythrocarpa</i>	Lauraceae	Lindera	AM
<i>Lindera metcalfiana</i>	Lauraceae	Lindera	AM
<i>Lindera obtusiloba</i>	Lauraceae	Lindera	AM
<i>Liquidambar formosana</i>	Hamamelidaceae	Liquidambar	EcM
<i>Lithocarpus brevicaudatus</i>	Fagaceae	Lithocarpus	EcM
<i>Lithocarpus cleistocarpus</i>	Fagaceae	Lithocarpus	EcM
<i>Lithocarpus craibianus</i>	Fagaceae	Lithocarpus	EcM
<i>Lithocarpus hancei</i>	Fagaceae	Lithocarpus	EcM
<i>Lithocarpus hancei</i>	Fagaceae	Lithocarpus	EcM
<i>Lithocarpus henryi</i>	Fagaceae	Lithocarpus	EcM
<i>Lithocarpus hypoglaucus</i>	Fagaceae	Lithocarpus	EcM
<i>Lithocarpus litseifolius</i>	Fagaceae	Lithocarpus	EcM
<i>Lithocarpus variolosus</i>	Fagaceae	Lithocarpus	EcM
<i>Litsea cubeba</i>	Lauraceae	Litsea	AM
<i>Litsea elongata</i>	Lauraceae	Litsea	AM
<i>Litsea pungens</i>	Lauraceae	Litsea	AM
<i>Lonicera hispida</i>	Caprifoliaceae	Lonicera	AM
<i>Lonicera japonica</i>	Caprifoliaceae	Lonicera	AM
<i>Lonicera webbiana</i>	Caprifoliaceae	Lonicera	AM
<i>Loropetalum chinense</i>	Hamamelidaceae	Loropetalum	AM
<i>Lyonia ovalifolia</i>	Ericaceae	Lyonia	ErM
<i>Machilus</i> sp.	Lauraceae	Machilus	AM
<i>Machilus grijsii</i>	Lauraceae	Machilus	AM
<i>Machilus pauhoi</i>	Lauraceae	Machilus	AM
<i>Machilus phoenicis</i>	Lauraceae	Machilus	AM
<i>Machilus thunbergii</i>	Lauraceae	Machilus	AM
<i>Maddenia hypoleuca</i>	Rosaceae	Maddenia	AM
<i>Mahonia</i> sp.	Berberidaceae	Mahonia	AM
<i>Mahonia fortunei</i>	Berberidaceae	Mahonia	AM
<i>Malus</i> sp.	Rosaceae	Malus	AM
<i>Malus hupehensis</i>	Rosaceae	Malus	AM
<i>Malus spectabilis</i>	Rosaceae	Malus	AM
<i>Manglietia fordiana</i>	Magnoliaceae	Manglietia	AM

<i>Meliosma cuneifolia</i>	Sabiaceae	Meliosma	AM
<i>Meliosma squamulata</i>	Sabiaceae	Meliosma	AM
<i>Meliosma rhoifolia</i>	Sabiaceae	Meliosma	AM
<i>Meliosma yunnanensis</i>	Sabiaceae	Meliosma	AM
<i>Metapanax delavayi</i>	Araliaceae	Metapanax	AM
<i>Michelia maudiae</i>	Magnoliaceae	Michelia	AM
<i>Myrica rubra</i>	Myricaceae	Myrica	AM
<i>Myrsine africana</i>	Myrsinaceae	Myrsine	AM
<i>Neolitsea aurata</i>	Lauraceae	Neolitsea	AM
<i>Padus obtusata</i>	Rosaceae	Padus	AM
<i>Padus racemosa</i>	Rosaceae	Padus	AM
<i>Philadelphus</i> sp.	Saxifragaceae	Philadelphus	AM
<i>Philadelphus incanus</i>	Saxifragaceae	Philadelphus	AM
<i>Phoebe bournei</i>	Lauraceae	Phoebe	AM
<i>Photinia</i> sp.	Rosaceae	Photinia	AM
<i>Photinia</i> sp1	Rosaceae	Photinia	AM
<i>Photinia beauverdiana</i>	Rosaceae	Photinia	AM
<i>Photinia parvifolia</i>	Rosaceae	Photinia	AM
<i>Photinia serrulata</i>	Rosaceae	Photinia	AM-EcM
<i>Phyllostachys edulis</i>	Poaceae	Phyllostachys	AM
<i>Picea brachytyla</i>	Pinaceae	Picea	EcM
<i>Pieris japonica</i>	Ericaceae	Pieris	ErM
<i>Pinus armandii</i>	Pinaceae	Pinus	EcM
<i>Pinus massoniana</i>	Pinaceae	Pinus	EcM
<i>Pinus tabulaeformis</i>	Pinaceae	Pinus	EcM
<i>Pinus taiwanensis</i>	Pinaceae	Pinus	EcM
<i>Pinus yunnanensis</i>	Pinaceae	Pinus	EcM
<i>Pistacia chinensis</i>	Anacardiaceae	Pistacia	AM
<i>Populus purdomii</i>	Salicaceae	Populus	AM
<i>Populus rotundifolia</i>	Salicaceae	Populus	AM-EcM
<i>Pyrus calleryana</i>	Rosaceae	Pyrus	AM
<i>Pyrus serrulata</i>	Rosaceae	Pyrus	AM
<i>Quercus</i> sp.	Fagaceae	Quercus	EcM
<i>Quercus</i> sp1	Fagaceae	Quercus	EcM
<i>Quercus aliena</i>	Fagaceae	Quercus	EcM
<i>Quercus griffithii</i>	Fagaceae	Quercus	EcM
<i>Quercus phillyraeoides</i>	Fagaceae	Quercus	EcM
<i>Quercus serrata</i>	Fagaceae	Quercus	EcM
<i>Quercus spinosa</i>	Fagaceae	Quercus	EcM
<i>Reevesia pubescens</i>	Sterculiaceae	Reevesia	AM
<i>Rhamnus crenata</i>	Rhamnaceae	Rhamnus	AM
<i>Rhododendron</i> sp.	Ericaceae	Rhododendron	ErM
<i>Rhododendron</i> sp1	Ericaceae	Rhododendron	ErM
<i>Rhododendron</i> sp2	Ericaceae	Rhododendron	ErM

<i>Rhododendron</i> sp3	Ericaceae	Rhododendron	ErM
<i>Rhododendron</i> sp4	Ericaceae	Rhododendron	ErM
<i>Rhododendron ambiguum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron anthosphaerum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron argyrophyllum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron calophytum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron decorum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron delavayi</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron farrerae</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron fortunei</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron irroratum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron latoucheae</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron mariesii</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron neriiflorum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron ovatum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron pachytrichum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron parvifolium</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron prattii</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron przewalskii</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron rigidum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron simiarum</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron simsii</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron sinogrande</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron watsonii</i>	Ericaceae	Rhododendron	ErM
<i>Rhododendron yunnanense</i>	Ericaceae	Rhododendron	ErM
<i>Ribes davidii</i>	Saxifragaceae	Ribes	AM
<i>Ribes tenue</i>	Saxifragaceae	Ribes	AM
<i>Salix</i> sp.	Salicaceae	Salix	AM-EcM
<i>Salix</i> sp1	Salicaceae	Salix	AM-EcM
<i>Salix resecta</i>	Salicaceae	Salix	AM-EcM
<i>Schima argentea</i>	Theaceae	Schima	AM
<i>Schima superba</i>	Theaceae	Schima	AM
<i>Sloanea sinensis</i>	Elaeocarpaceae	Sloanea	AM
<i>Sorbus</i> sp.	Rosaceae	Sorbus	AM
<i>Sorbus prattii</i>	Rosaceae	Sorbus	AM
<i>Sorbus rehderiana</i>	Rosaceae	Sorbus	AM
<i>Sorbus</i> sp1	Rosaceae	Sorbus	AM
<i>Sorbus thibetica</i>	Rosaceae	Sorbus	AM
<i>Spiraea cantoniensis</i>	Rosaceae	Spiraea	AM
<i>Stewartia sinensis</i>	Theaceae	Stewartia	AM
<i>Stranvaesia davidiana</i>	Rosaceae	Stranvaesia	AM
<i>Styrax</i> sp.	Styracaceae	Styrax	AM
<i>Symplocos</i> sp.	Symplocaceae	Symplocos	AM
<i>Symplocos</i> sp1	Symplocaceae	Symplocos	AM

<i>Symplocos anomala</i>	Symplocaceae	Symplocos	AM
<i>Symplocos congesta</i>	Symplocaceae	Symplocos	AM
<i>Symplocos glauca</i>	Symplocaceae	Symplocos	AM
<i>Symplocos lancifolia</i>	Symplocaceae	Symplocos	AM
<i>Symplocos paniculata</i>	Symplocaceae	Symplocos	AM
<i>Symplocos stellaris</i>	Symplocaceae	Symplocos	AM
<i>Symplocos sumuntia</i>	Symplocaceae	Symplocos	AM
<i>Syzygium austrosinense</i>	Myrtaceae	Syzygium	AM
<i>Syzygium buxifolium</i>	Myrtaceae	Syzygium	AM
<i>Ternstroemia</i> sp.	Theaceae	Ternstroemia	EcM
<i>Ternstroemia gymnanthera</i>	Theaceae	Ternstroemia	EcM
<i>Tetracentron sinense</i>	Magnoliaceae	Tetracentron	AM
<i>Toxicodendron trichocarpum</i>	Anacardiaceae	Toxicodendron	AM
<i>Toxicodendron vernicifluum</i>	Anacardiaceae	Toxicodendron	AM
<i>Tsuga chinensis</i>	Pinaceae	Tsuga	EcM
<i>Tsuga dumosa</i>	Pinaceae	Tsuga	EcM
<i>Ulmus</i> sp.	Ulmaceae	Ulmus	AM-EcM
<i>Vaccinium bracteatum</i>	Ericaceae	Vaccinium	ErM
<i>Vaccinium carlesii</i>	Ericaceae	Vaccinium	ErM
<i>Vaccinium trichocladum</i>	Ericaceae	Vaccinium	ErM
<i>Vaccinium vitis-idaea</i>	Ericaceae	Vaccinium	ErM
<i>Viburnum</i> sp.	Caprifoliaceae	Viburnum	AM
<i>Viburnum</i> sp1	Caprifoliaceae	Viburnum	AM
<i>Viburnum corymbiflorum</i>	Caprifoliaceae	Viburnum	AM
<i>Viburnum cylindricum</i>	Caprifoliaceae	Viburnum	AM
<i>Viburnum dilatatum</i>	Caprifoliaceae	Viburnum	AM
<i>Viburnum nervosum</i>	Caprifoliaceae	Viburnum	AM
<i>Yulania</i> sp.	Magnoliaceae	Yulania	AM
<i>Yulania denudata</i>	Magnoliaceae	Yulania	AM

Note: *Acer* sp., *Acer* sp1 indicate different unidentified species in the genus *Acer*. Those unidentified species in other genera are similarly expressed. The mycorrhizal types were assigned based on the FungalRoot database (Soudzilovskaia et al., 2019) and public literatures.

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