

# Supplementary Material - Mujica et al.

## 1 Adding randomly 20% of misassignment of mycorrhizal type

## 2 Analysis per genera including all families

### 2.1 Boxplots

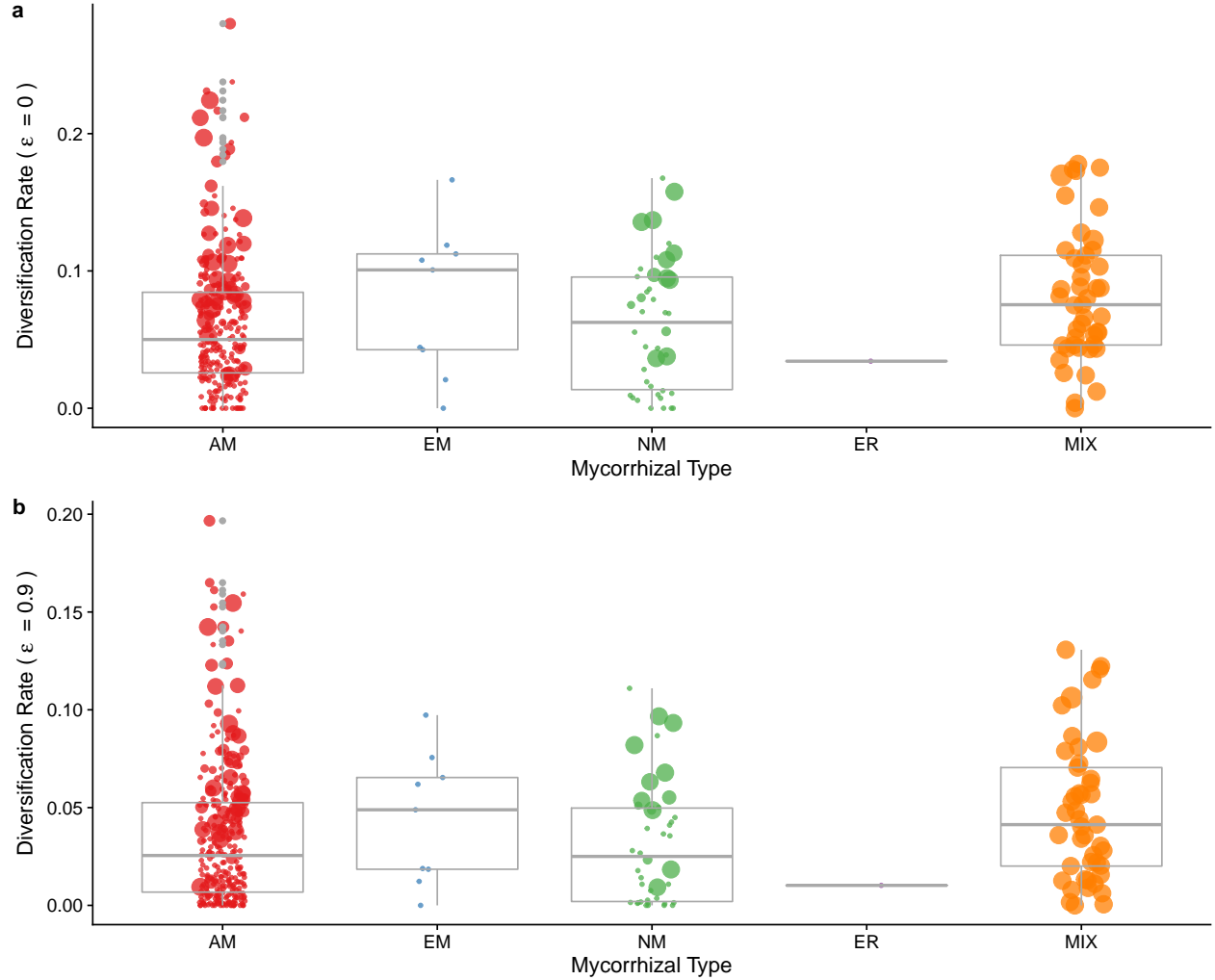


Figure 1: Relationship between mycorrhizal type and diversification rates. a) diversification rate estimated with (relative extinction fraction) = 0 and b) diversification rate estimated with = 0.9. AM: Arbuscular mycorrhiza, EM: Ectomycorrhiza, NM: non-mycorrhizal and MIX (families with no dominance of any specific mycorrhizal association). The size of the points indicates the Mycorrhizal Type Diversity Index value for each lineage, indicating a predominance of larger indices with higher diversification rates.

## 2.2 Scatterplots

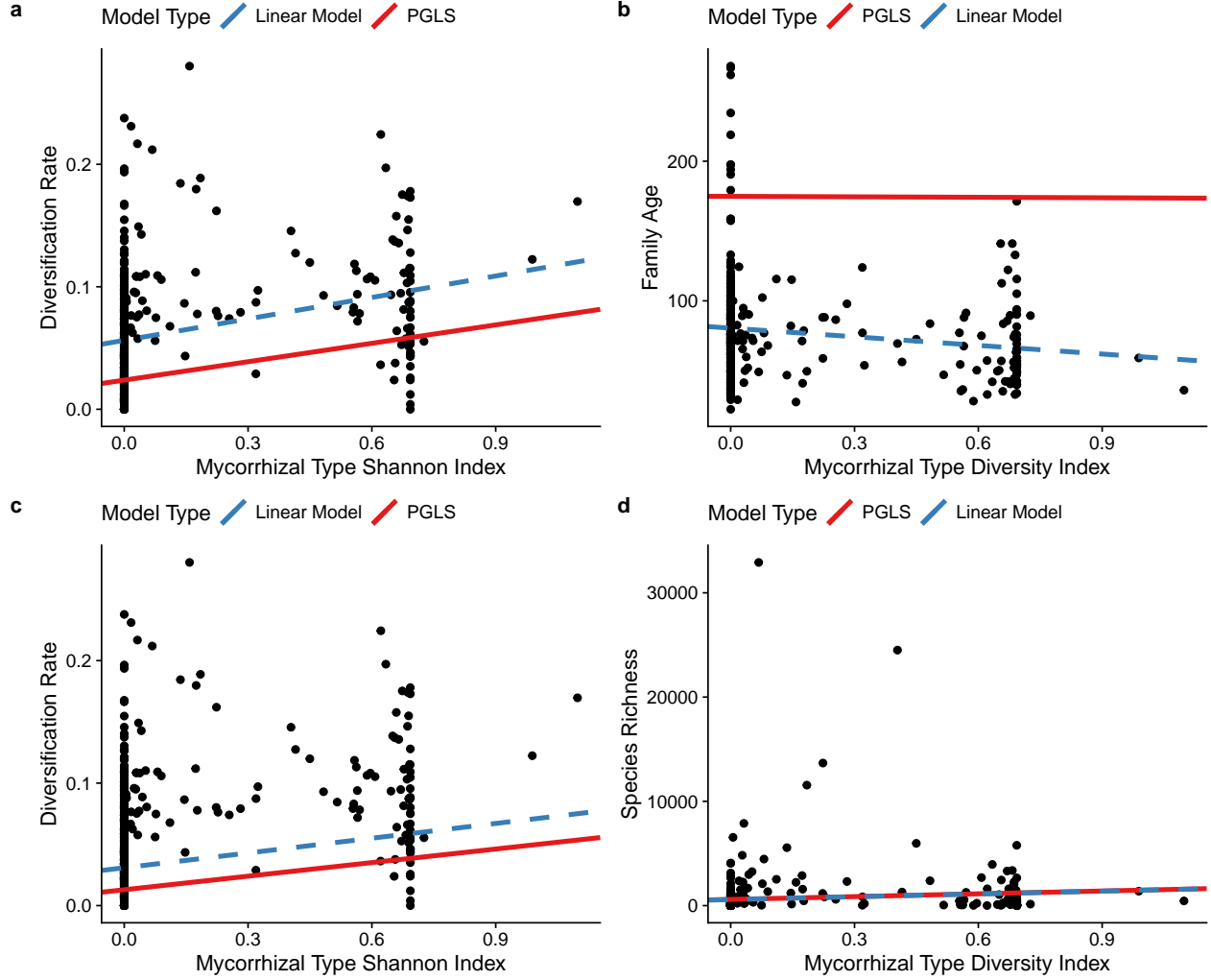


Figure 2: Scatterplots showing the relationship between mycorrhizal diversity index and diversification rates (a and c), species richness (b) and age family (d). Diversification rates were estimated with (relative extinction fraction) = 0 (a) and with = 0.9 (c). The red and blue lines indicate the results of a linear model and a phylogenetic generalized least squares (PGLS) fit, respectively.

## 3 Different thresholds for main mycorrhizal type

### 3.1 Family classification based on different thresholds

Table 1: Mycorrhizal type assigned to each family based on 4 different percentage thresholds (50, 60, 80 and 100)

	Family	0.5	0.6	0.8	1
1	Acanthaceae	AM	AM	MIX	MIX
2	Achariaceae	AM	AM	AM	AM
3	Achatocarpaceae	MIX	MIX	MIX	MIX
4	Acoraceae	MIX	MIX	MIX	MIX

5	Actinidiaceae	AM	AM	AM	AM
6	Adoxaceae	AM	AM	AM	MIX
7	Aextoxicaceae	AM	AM	AM	AM
8	Aizoaceae	NM	MIX	MIX	MIX
9	Akaniaceae	AM	AM	AM	AM
10	Alismataceae	MIX	MIX	MIX	MIX
11	Alseuosmiaceae	AM	AM	AM	AM
12	Alstroemeriaceae	AM	AM	AM	AM
13	Altingiaceae	AM	AM	AM	AM
14	Amaranthaceae	NM	MIX	MIX	MIX
15	Amaryllidaceae	AM	AM	AM	MIX
16	Amborellaceae	AM	AM	AM	AM
18	Anacardiaceae	AM	AM	AM	AM
19	Anarthriaceae	MIX	MIX	MIX	MIX
20	Ancistrocladaceae	AM	AM	AM	AM
21	Anisophylleaceae	AM	AM	AM	AM
22	Annonaceae	AM	AM	AM	AM
24	Aphloiaceae	AM	AM	AM	AM
25	Apiaceae	AM	AM	AM	MIX
26	Apocynaceae	AM	AM	AM	MIX
27	Apodanthaceae	NM	NM	NM	NM
28	Aponogetonaceae	MIX	MIX	MIX	MIX
29	Aquifoliaceae	AM	AM	AM	AM
30	Araceae	AM	MIX	MIX	MIX
31	Araliaceae	AM	AM	AM	MIX
32	Araucariaceae	AM	AM	AM	AM
33	Arecaceae	AM	AM	AM	MIX
34	Argophyllaceae	AM	AM	AM	AM
35	Aristolochiaceae	AM	AM	MIX	MIX
36	Asparagaceae	AM	AM	AM	MIX
37	Asteliaceae	AM	AM	AM	AM
38	Asteropeiaceae	MIX	MIX	MIX	MIX
39	Atherospermataceae	AM	AM	AM	AM
40	Austrobaileyaceae	AM	AM	AM	AM
41	Balanopaceae	AM	AM	AM	AM
42	Balanophoraceae	NM	NM	NM	NM
43	Balsaminaceae	AM	AM	AM	AM
45	Barbeyaceae	AM	AM	AM	AM
46	Basellaceae	AM	AM	AM	AM
47	Bataceae	MIX	MIX	MIX	MIX
48	Begoniaceae	AM	AM	AM	AM
49	Berberidaceae	AM	AM	AM	AM
51	Betulaceae	EM	EM	EM	EM
52	Biebersteiniaceae	AM	AM	AM	AM
53	Bignoniaceae	AM	AM	AM	MIX
54	Bixaceae	AM	AM	AM	AM
55	Blandfordiaceae	AM	AM	AM	AM
56	Bonnetiaceae	AM	AM	AM	AM
57	Boraginaceae	AM	AM	MIX	MIX
58	Boryaceae	AM	AM	AM	AM
59	Brassicaceae	NM	NM	NM	NM

60	Bromeliaceae	NM	NM	MIX	MIX
61	Brunelliaceae	AM	AM	AM	AM
62	Bruniaceae	AM	AM	AM	AM
63	Burmanniaceae	AM	AM	AM	AM
64	Burseraceae	AM	AM	AM	MIX
65	Butomaceae	NM	NM	NM	NM
66	Buxaceae	AM	AM	AM	AM
67	Byblidaceae	NM	NM	NM	NM
68	Cabombaceae	NM	NM	NM	NM
69	Cactaceae	AM	AM	AM	MIX
70	Calceolariaceae	AM	AM	AM	AM
71	Calophyllaceae	AM	AM	AM	AM
72	Calycanthaceae	AM	AM	AM	AM
73	Calyceraceae	AM	AM	AM	AM
74	Campanulaceae	AM	AM	AM	MIX
75	Campynemataceae	AM	AM	AM	AM
76	Canellaceae	AM	AM	AM	AM
77	Cannabaceae	AM	AM	AM	AM
78	Cannaceae	AM	AM	AM	AM
79	Capparaceae	AM	AM	MIX	MIX
80	Caprifoliaceae	AM	AM	AM	AM
81	Cardiopteridaceae	AM	AM	AM	AM
82	Caricaceae	AM	AM	AM	AM
83	Carlemanniaceae	AM	AM	AM	AM
84	Caryocaraceae	AM	AM	AM	AM
85	Caryophyllaceae	NM	NM	MIX	MIX
86	Casuarinaceae	AM	MIX	MIX	MIX
87	Celastraceae	AM	AM	AM	MIX
88	Centrolepidaceae	MIX	MIX	MIX	MIX
89	Cephalotaceae	NM	NM	NM	NM
90	Ceratophyllaceae	NM	NM	NM	NM
91	Cercidiphyllaceae	AM	AM	AM	AM
92	Chloranthaceae	AM	AM	AM	AM
93	Chrysobalanaceae	AM	AM	AM	AM
94	Circaeasteraceae	AM	AM	AM	AM
95	Cistaceae	EM	EM	EM	EM
96	Cleomaceae	AM	MIX	MIX	MIX
97	Clethraceae	AM	AM	AM	AM
98	Clusiaceae	AM	AM	AM	AM
99	Colchicaceae	AM	AM	AM	AM
100	Columelliaceae	AM	AM	AM	AM
101	Combretaceae	AM	AM	AM	AM
102	Commelinaceae	NM	MIX	MIX	MIX
103	Asteraceae	AM	AM	AM	MIX
104	Connaraceae	AM	AM	AM	AM
105	Convolvulaceae	AM	AM	AM	MIX
106	Coriariaceae	AM	AM	AM	AM
107	Cornaceae	AM	AM	AM	AM
108	Corsiaceae	AM	AM	AM	AM
109	Corynocarpaceae	AM	AM	AM	AM
110	Costaceae	AM	AM	AM	AM

111	Crassulaceae	NM	MIX	MIX	MIX
113	Ctenolophonaceae	AM	AM	AM	AM
114	Cucurbitaceae	AM	AM	AM	AM
115	Cunoniaceae	AM	AM	AM	MIX
116	Cupressaceae	AM	AM	AM	AM
117	Curtisiaceae	AM	AM	AM	AM
118	Cycadaceae	AM	AM	AM	AM
119	Cyclanthaceae	NM	NM	MIX	MIX
120	Cymodoceaceae	NM	NM	NM	NM
121	Cynomoriaceae	NM	NM	NM	NM
122	Cyperaceae	NM	MIX	MIX	MIX
123	Cyrillaceae	AM	AM	AM	AM
124	Cytinaceae	AM	AM	AM	AM
125	Daphniphyllaceae	AM	AM	AM	AM
126	Dasypogonaceae	MIX	MIX	MIX	MIX
127	Datisceae	AM	AM	AM	AM
128	Degeneriaceae	AM	AM	AM	AM
129	Diapensiaceae	ER	ER	ER	ER
130	Dichapetalaceae	AM	AM	AM	AM
132	Dilleniaceae	AM	AM	AM	AM
134	Dioscoreaceae	AM	AM	AM	AM
135	Dipentodontaceae	AM	AM	AM	AM
136	Dipterocarpaceae	EM	EM	EM	EM
137	Dirachmaceae	AM	AM	AM	AM
138	Doryanthaceae	AM	AM	AM	AM
139	Droseraceae	NM	NM	NM	NM
140	Drosophyllaceae	NM	NM	NM	NM
141	Ebenaceae	AM	AM	AM	AM
142	Ecdeiocolleaceae	AM	AM	AM	AM
143	Elaeagnaceae	AM	AM	AM	AM
144	Elaeocarpaceae	AM	AM	AM	AM
145	Elatinaceae	NM	MIX	MIX	MIX
146	Emblingiaceae	NM	NM	NM	NM
147	Ephedraceae	AM	AM	AM	AM
148	Ericaceae	ER	ER	ER	MIX
149	Eriocaulaceae	AM	AM	AM	MIX
150	Erythroxylaceae	AM	AM	AM	AM
151	Escalloniaceae	AM	AM	AM	AM
152	Eucommiaceae	AM	AM	AM	AM
153	Euphorbiaceae	AM	AM	AM	MIX
154	Euphroniaceae	AM	AM	AM	AM
155	Eupomatiaceae	AM	AM	AM	AM
156	Eupteleaceae	AM	AM	AM	AM
157	Fagaceae	EM	EM	EM	EM
158	Flagellariaceae	AM	AM	AM	AM
159	Fouquieriaceae	AM	AM	AM	AM
160	Frankeniaceae	NM	NM	NM	NM
161	Garryaceae	AM	AM	AM	AM
163	Gelsemiaceae	AM	AM	AM	AM
164	Gentianaceae	AM	AM	AM	MIX
165	Geraniaceae	AM	AM	AM	AM

167	Gesneriaceae	AM	AM	AM	AM
168	Ginkgoaceae	AM	AM	AM	AM
169	Gisekiaceae	MIX	MIX	MIX	MIX
170	Gnetaceae	EM	EM	EM	EM
171	Gomortegaceae	AM	AM	AM	AM
172	Goodeniaceae	AM	MIX	MIX	MIX
173	Goupiaceae	AM	AM	AM	AM
174	Grossulariaceae	AM	AM	AM	AM
175	Grubbiaceae	AM	AM	AM	AM
176	Gunneraceae	AM	AM	AM	AM
177	Gyrostemonaceae	NM	NM	NM	NM
178	Haemodoraceae	NM	NM	NM	NM
179	Halophytaceae	NM	NM	NM	NM
180	Haloragaceae	AM	AM	MIX	MIX
181	Hamamelidaceae	AM	AM	AM	AM
182	Hanguanaceae	AM	AM	AM	AM
183	Haptanthaceae	AM	AM	AM	AM
184	Heliconiaceae	AM	AM	AM	AM
185	Helwingiaceae	AM	AM	AM	AM
186	Hernandiaceae	AM	AM	AM	AM
187	Himantandraceae	AM	AM	AM	AM
188	Huaceae	AM	AM	AM	AM
189	Humiriaceae	AM	AM	AM	AM
191	Hydnoraceae	AM	AM	AM	AM
192	Hydrangeaceae	AM	AM	AM	MIX
193	Hydrocharitaceae	NM	MIX	MIX	MIX
194	Hydroleaceae	MIX	MIX	MIX	MIX
196	Hypericaceae	AM	AM	AM	AM
197	Hypoxidaceae	AM	AM	AM	AM
198	Icacinaceae	AM	AM	AM	AM
199	Iridaceae	AM	AM	AM	MIX
200	Irvingiaceae	AM	AM	AM	AM
201	Iteaceae	AM	AM	AM	AM
202	Ixioliriaceae	AM	AM	AM	AM
203	Ixonanthaceae	AM	AM	AM	AM
204	Joinvilleaceae	AM	AM	AM	AM
205	Juglandaceae	EM	MIX	MIX	MIX
206	Juncaceae	MIX	MIX	MIX	MIX
207	Juncaginaceae	NM	NM	NM	MIX
208	Kirkiaceae	AM	AM	AM	AM
209	Koeberliniaceae	NM	NM	NM	NM
210	Krameriaceae	AM	AM	AM	AM
211	Lacistemataceae	AM	AM	AM	AM
212	Lactoridaceae	AM	AM	AM	AM
213	Lamiaceae	AM	AM	AM	MIX
214	Lanariaceae	AM	AM	AM	AM
215	Lardizabalaceae	AM	AM	AM	AM
216	Lauraceae	AM	AM	AM	MIX
217	Lecythidaceae	AM	AM	AM	MIX
218	Fabaceae	AM	AM	AM	MIX
219	Lentibulariaceae	NM	NM	MIX	MIX

220	Lepidobotryaceae	AM	AM	AM	AM
221	Liliaceae	AM	AM	AM	AM
223	Limnanthaceae	NM	NM	NM	NM
224	Linaceae	AM	AM	AM	AM
225	Linderniaceae	NM	MIX	MIX	MIX
226	Loasaceae	NM	NM	NM	MIX
227	Loganiaceae	AM	AM	AM	AM
228	Loranthaceae	NM	NM	NM	NM
229	Lowiaceae	AM	AM	AM	AM
230	Lythraceae	AM	AM	AM	MIX
231	Magnoliaceae	AM	AM	AM	AM
232	Malpighiaceae	AM	AM	AM	AM
233	Malvaceae	AM	AM	AM	MIX
234	Marantaceae	AM	AM	MIX	MIX
235	Marcgraviaceae	AM	AM	AM	AM
236	Martyniaceae	AM	AM	AM	AM
238	Melanthiaceae	AM	AM	AM	AM
239	Melastomataceae	AM	AM	AM	AM
240	Meliaceae	AM	AM	AM	AM
241	Melianthaceae	AM	AM	AM	AM
242	Menispermaceae	AM	AM	AM	AM
243	Menyanthaceae	NM	MIX	MIX	MIX
245	Misodendraceae	NM	NM	NM	NM
246	Mitrastemonaceae	NM	NM	NM	NM
247	Molluginaceae	NM	NM	MIX	MIX
248	Monimiaceae	AM	AM	AM	AM
249	Montiaceae	AM	AM	MIX	MIX
250	Montiniaceae	AM	AM	AM	AM
251	Moraceae	AM	AM	AM	MIX
252	Moringaceae	AM	AM	AM	AM
253	Muntingiaceae	AM	AM	AM	AM
254	Musaceae	AM	AM	AM	AM
255	Myodocarpaceae	AM	AM	AM	AM
256	Myricaceae	AM	AM	MIX	MIX
257	Myristicaceae	AM	AM	AM	AM
258	Myrothamnaceae	AM	AM	AM	AM
259	Myrtaceae	AM	AM	AM	MIX
260	Nartheciaceae	AM	AM	AM	MIX
261	Nelumbonaceae	NM	NM	NM	NM
262	Nepenthaceae	MIX	MIX	MIX	MIX
263	Neuradaceae	AM	AM	AM	AM
264	Nitrariaceae	AM	AM	AM	AM
265	Nothofagaceae	EM	EM	EM	EM
266	Nyctaginaceae	MIX	MIX	MIX	MIX
267	Nymphaeaceae	NM	NM	MIX	MIX
268	Ochnaceae	AM	AM	MIX	MIX
269	Olcaceae	AM	AM	AM	MIX
270	Oleaceae	AM	AM	AM	AM
271	Onagraceae	AM	AM	AM	MIX
272	Oncothecaceae	AM	AM	AM	AM
273	Opiliaceae	MIX	MIX	MIX	MIX

274	Orchidaceae	OM	OM	OM	MIX
275	Orobanchaceae	NM	MIX	MIX	MIX
276	Oxalidaceae	AM	AM	AM	AM
277	Paeoniaceae	AM	AM	AM	AM
278	Pandaceae	AM	AM	AM	AM
279	Pandanaceae	AM	AM	MIX	MIX
280	Papaveraceae	NM	MIX	MIX	MIX
281	Paracryphiaceae	AM	AM	AM	AM
282	Passifloraceae	AM	AM	AM	AM
283	Paulowniaceae	AM	AM	MIX	MIX
284	Pedaliaceae	AM	AM	MIX	MIX
285	Penaeaceae	AM	AM	AM	AM
286	Pentadiplandraceae	NM	NM	NM	NM
287	Pentaphragmataceae	AM	AM	AM	AM
288	Pentaphylacaceae	AM	AM	AM	AM
290	Peridiscaceae	AM	AM	AM	AM
291	Petermanniaceae	AM	AM	AM	AM
292	Petrosaviaceae	AM	AM	AM	AM
293	Philesiaceae	AM	AM	AM	AM
294	Philydraceae	AM	AM	AM	AM
295	Phrymaceae	AM	AM	AM	AM
296	Phyllanthaceae	AM	AM	AM	MIX
297	Phyllonomaceae	AM	AM	AM	AM
299	Phytolaccaceae	NM	NM	MIX	MIX
300	Picramniaceae	AM	AM	AM	AM
301	Picrodendraceae	AM	AM	AM	AM
302	Pinaceae	EM	EM	EM	EM
303	Piperaceae	AM	MIX	MIX	MIX
304	Pittosporaceae	AM	AM	AM	AM
305	Plantaginaceae	AM	AM	MIX	MIX
306	Platanaceae	AM	AM	AM	AM
307	Plocospermataceae	AM	AM	AM	AM
308	Plumbaginaceae	NM	MIX	MIX	MIX
309	Poaceae	AM	AM	AM	MIX
310	Podocarpaceae	AM	AM	AM	AM
311	Podostemaceae	NM	NM	NM	NM
312	Polemoniaceae	AM	AM	AM	MIX
313	Polygalaceae	AM	AM	AM	AM
314	Polygonaceae	MIX	MIX	MIX	MIX
315	Pontederiaceae	MIX	MIX	MIX	MIX
316	Portulacaceae	NM	NM	MIX	MIX
317	Posidoniaceae	NM	NM	NM	NM
318	Potamogetonaceae	NM	NM	NM	MIX
319	Primulaceae	AM	AM	AM	AM
320	Proteaceae	NM	NM	NM	MIX
321	Putranjivaceae	AM	AM	AM	AM
322	Quillajaceae	AM	AM	AM	AM
323	Rafflesiaceae	NM	NM	NM	NM
324	Ranunculaceae	AM	AM	AM	MIX
325	Rapateaceae	AM	AM	AM	AM
326	Resedaceae	NM	NM	NM	NM



327	Restionaceae	NM	MIX	MIX	MIX
329	Rhamnaceae	AM	AM	AM	MIX
330	Rhipogonaceae	AM	AM	AM	AM
331	Rhizophoraceae	AM	MIX	MIX	MIX
332	Roridulaceae	NM	NM	NM	NM
333	Rosaceae	AM	AM	AM	MIX
334	Rousseaceae	AM	AM	AM	AM
335	Rubiaceae	AM	AM	AM	MIX
336	Ruppiaceae	MIX	MIX	MIX	MIX
337	Rutaceae	AM	AM	AM	MIX
338	Sabiaceae	AM	AM	AM	AM
339	Salicaceae	AM	AM	MIX	MIX
340	Salvadoraceae	NM	NM	MIX	MIX
341	Santalaceae	MIX	MIX	MIX	MIX
342	Sapindaceae	AM	AM	AM	AM
343	Sapotaceae	AM	AM	AM	MIX
344	Sarcobataceae	NM	NM	NM	NM
345	Sarcolaenaceae	EM	EM	EM	EM
346	Sarraceniaceae	NM	NM	NM	NM
347	Saururaceae	AM	AM	AM	AM
348	Saxifragaceae	NM	MIX	MIX	MIX
349	Scheuchzeriaceae	MIX	MIX	MIX	MIX
350	Schisandraceae	AM	AM	AM	AM
351	Schlegeliaceae	AM	AM	AM	AM
352	Schoepfiaceae	AM	AM	AM	AM
353	Sciadopityaceae	AM	AM	AM	AM
354	Scrophulariaceae	AM	AM	AM	MIX
356	Simaroubaceae	AM	AM	AM	AM
357	Simmondsiaceae	AM	AM	AM	AM
358	Siparunaceae	AM	AM	AM	AM
359	Sladeniaceae	AM	AM	AM	AM
360	Smilacaceae	AM	AM	AM	AM
361	Solanaceae	AM	AM	AM	AM
362	Sphaerosepalaceae	AM	AM	AM	AM
363	Sphenocleaceae	NM	NM	NM	NM
364	Stachyuraceae	AM	AM	AM	AM
365	Staphyleaceae	AM	AM	AM	AM
366	Stegnospermataceae	AM	AM	AM	AM
367	Stemonaceae	AM	AM	AM	AM
368	Stemonuraceae	AM	AM	AM	AM
369	Stilbaceae	AM	AM	AM	AM
371	Strelitziaceae	AM	AM	AM	AM
372	Stylidiaceae	AM	AM	AM	AM
373	Styracaceae	AM	AM	AM	AM
374	Surianaceae	AM	AM	AM	AM
375	Symplocaceae	AM	AM	AM	AM
377	Tamaricaceae	MIX	MIX	MIX	MIX
378	Tapisciaceae	AM	AM	AM	AM
379	Taxaceae	AM	AM	AM	AM
380	Tecophilaeaceae	AM	AM	AM	AM
381	Tetrachondraceae	AM	AM	AM	AM

382	Tetramelaceae	AM	AM	AM	AM
383	Tetrameristaceae	AM	AM	AM	AM
384	Theaceae	AM	AM	AM	AM
385	Thurniaceae	AM	AM	AM	AM
386	Thymelaeaceae	AM	AM	AM	MIX
387	Ticodendraceae	EM	EM	EM	EM
388	Tofieldiaceae	AM	AM	MIX	MIX
389	Torricelliaceae	AM	AM	AM	AM
391	Trigoniaceae	AM	AM	AM	AM
392	Triuridaceae	AM	AM	AM	AM
393	Trochodendraceae	AM	AM	AM	AM
394	Tropaeolaceae	AM	AM	AM	AM
395	Typhaceae	MIX	MIX	MIX	MIX
396	Ulmaceae	AM	AM	AM	AM
397	Urticaceae	AM	MIX	MIX	MIX
398	Vahliaceae	AM	AM	AM	AM
399	Velloziaceae	AM	AM	AM	AM
400	Verbenaceae	AM	AM	AM	AM
401	Violaceae	AM	AM	AM	AM
402	Vitaceae	AM	AM	AM	AM
403	Vivianiaceae	AM	AM	AM	AM
404	Vochysiaceae	AM	AM	AM	AM
405	Welwitschiaceae	AM	AM	AM	AM
406	Winteraceae	AM	AM	AM	AM
407	Xanthorrhoeaceae	AM	AM	AM	AM
408	Xeronemataceae	AM	AM	AM	AM
409	Xyridaceae	MIX	MIX	MIX	MIX
410	Zamiaceae	AM	AM	AM	AM
411	Zingiberaceae	AM	AM	AM	AM
412	Zosteraceae	NM	NM	NM	NM
413	Zygophyllaceae	AM	AM	MIX	MIX

## 4 Phylogenetic signal of diversification rates, age, and richness

Table 2: Phylogenetic signal of the four response variables

Variable	Lambda
r (epsilon = 0)	0.4747942
r (epsilon = 0.9)	0.3581693
Stem Age	1.0000000
Richness	0.0000010

## 5 Phylogenetic ANOVA

### 5.1 Summary statistics

Table 3: phyANOVA summary statistics for both values of epsilon

epsilon	F	pvalue
0.0	7.255048	0.011
0.9	7.349522	0.009

### 5.2 Posthoc tests

Table 4: Pairwise Corrected p-values for epsilon = 0

	AM	EM	MIX	NM
AM	1.000	1	0.006	1.000
EM	1.000	1	1.000	1.000
MIX	0.006	1	1.000	0.006
NM	1.000	1	0.006	1.000

Table 5: Pairwise Corrected p-values for epsilon = 0.9

	AM	EM	MIX	NM
AM	1.000	1.00	0.006	1.000
EM	1.000	1.00	0.980	1.000
MIX	0.006	0.98	1.000	0.006
NM	1.000	1.00	0.006	1.000

## 6 Species-level database

### 6.1 Clean database - excluding species with any remark

#### 6.1.1 Boxplots

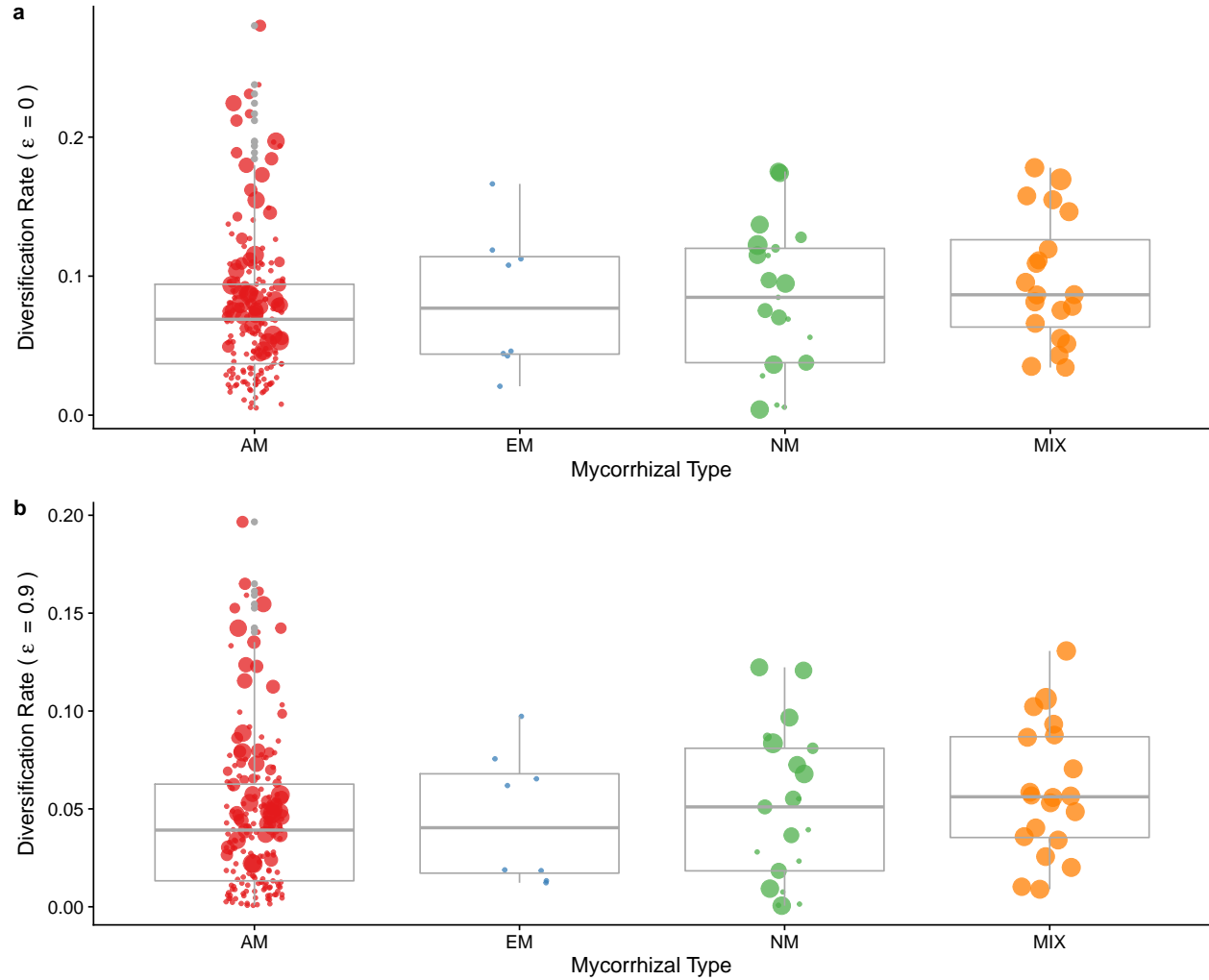


Figure 3: Relationship between mycorrhizal type and diversification rates. a) diversification rate estimated with (relative extinction fraction) = 0 and b) diversification rate estimated with = 0.9. AM: Arbuscular mycorrhiza, EM: Ectomycorrhiza, NM: non-mycorrhizal and MIX (families with no dominance of any specific mycorrhizal association). The size of the points indicates the Mycorrhizal Type Diversity Index value for each lineage, indicating a predominance of larger indices with higher diversification rates.

### 6.1.2 Scatterplots

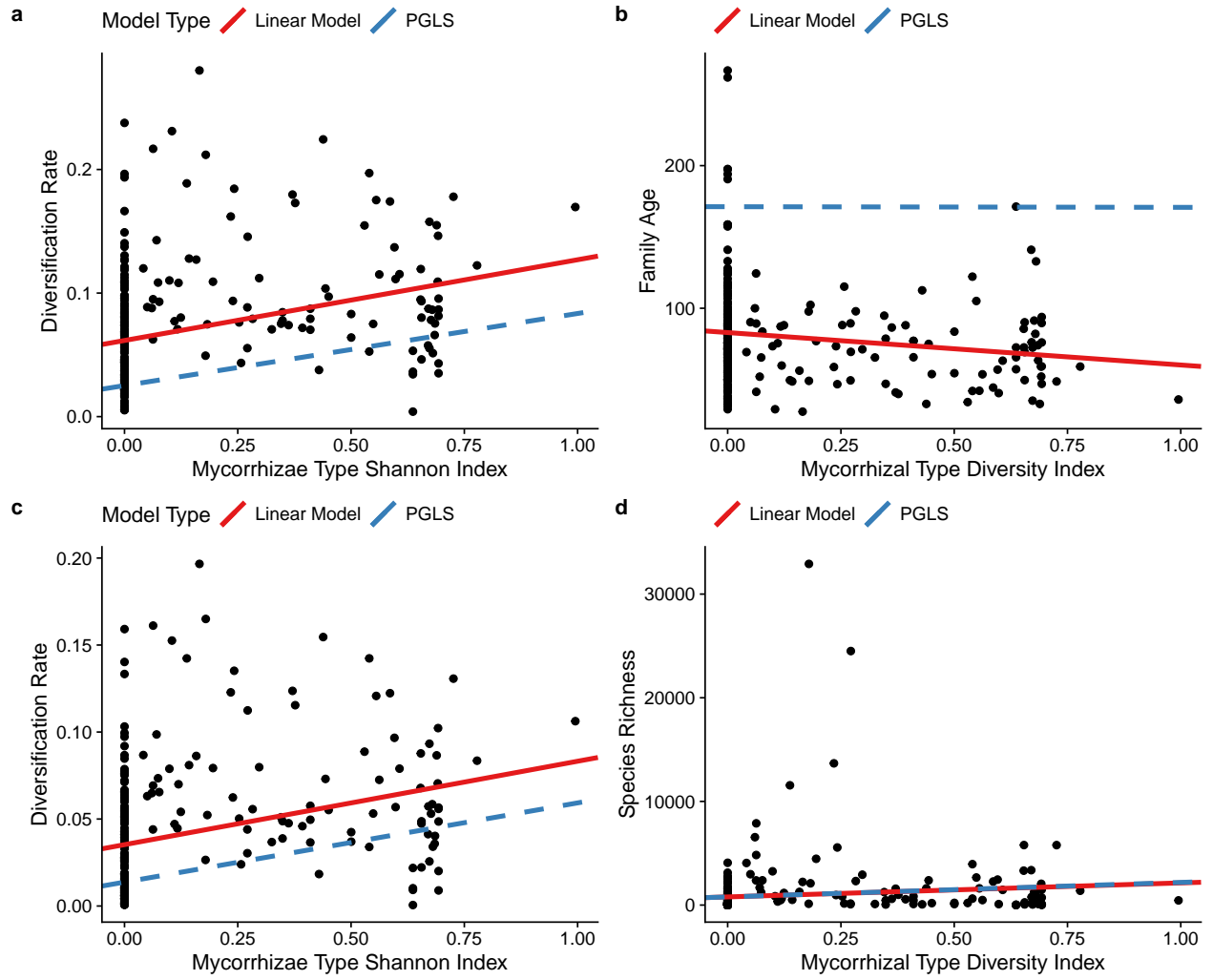


Figure 4: Scatterplots showing the relationship between mycorrhizal diversity index and diversification rates (a and c), species richness (b) and age family (d). Diversification rates were estimated with (relative extinction fraction) = 0 (a) and with = 0.9 (c). The red and blue lines indicate the results of a linear model and a phylogenetic generalized least squares (PGLS) fit, respectively.

## 6.2 More inclusive database - including species with any remark

### 6.2.1 Boxplots

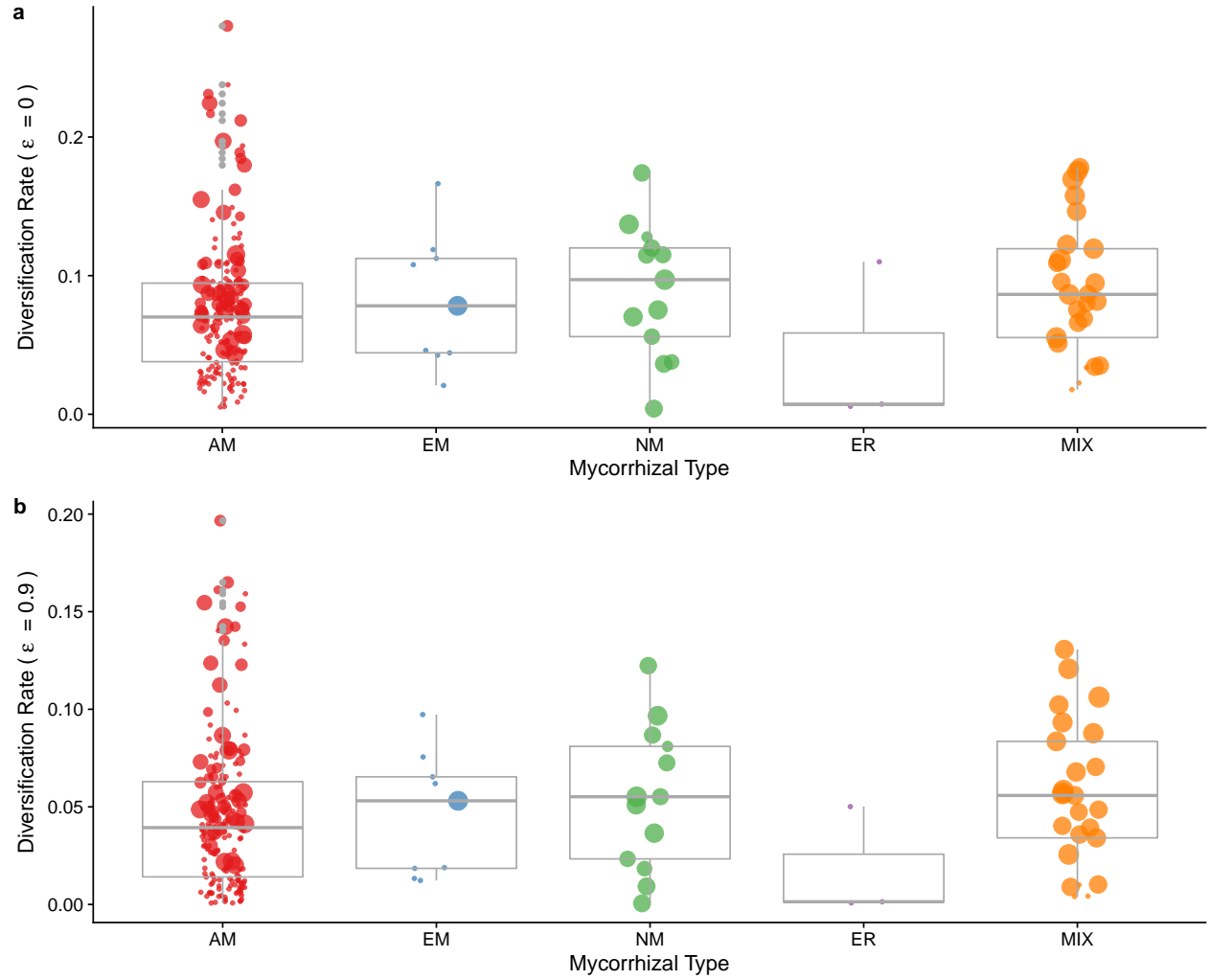


Figure 5: Relationship between mycorrhizal type and diversification rates. a) diversification rate estimated with (relative extinction fraction) = 0 and b) diversification rate estimated with = 0.9. AM: Arbuscular mycorrhiza, EM: Ectomycorrhiza, NM: non-mycorrhizal and MIX (families with no dominance of any specific mycorrhizal association). The size of the points indicates the Mycorrhizal Type Diversity Index value for each lineage, indicating a predominance of larger indices with higher diversification rates.

## 6.2.2 Scatterplots

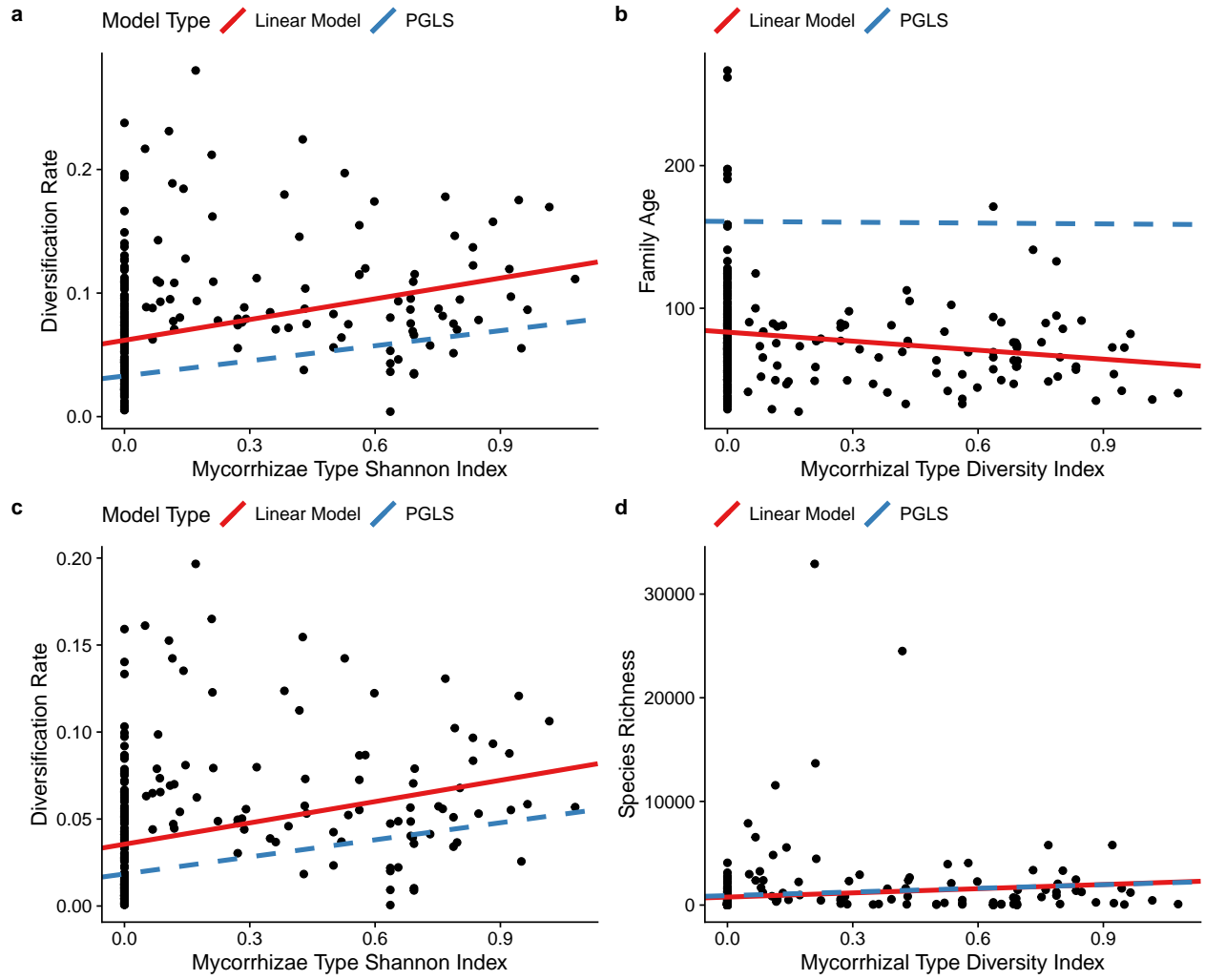


Figure 6: Scatterplots showing the relationship between mycorrhizal diversity index and diversification rates (a and c), species richness (b) and age family (d). Diversification rates were estimated with (relative extinction fraction) = 0 (a) and with = 0.9 (c). The red and blue lines indicate the results of a linear model and a phylogenetic generalized least squares (PGLS) fit, respectively.