Table S3. Results of Mantel tests (Replacement and Nestedness components vs spatial distance) and partial Mantel correlograms (in relation to biotic and abiotic factors).

	Mantel test				Mantel correlograms (in the first distance class)							
							Partial Mantel test controlling the effect of other variables					
	Replacement[1]		Nestedness[2]		Mantel test		Plant community		Soil		Neighbourhood	
	Mantel-r	P valu	Mantel-r	P value	Mantel-r	P value	Mantel-r	P value	Mantel-r	P value	Mantel-r	P value
Site1												
Fungi	0.13	0.08	-0.04	0.62	**0.14**	**0.04**	0.02	0.37	**0.15**	0.02	0.1	0.07
Basidiomycota	**0.3**	0	-0.04	0.66	0.25	0	0.13	0.06	**0.24**	0	**0.18**	0.01
Ascomycota	0	0.5	0.01	0.41	ns	-	ns	-	ns	-	ns	-
Ectomycorrhizal fungi	**0.37**	0	-0.2	0.99	**0.52**	**0**	**0.43**	0	**0.56**	0	**0.4**	0
Zygomycota	0.15	0.05	-0.09	0.86	**0.12**	**0.02**	0.03	0.29	0.11	0.02	0.08	0.08
Chytridiomycota	0.02	0.42	-0.01	0.49	ns	-	-	-	-	-	-	-
Metazoa	0.01	0.42	0.02	0.33	ns	-	-	-	-	-	-	-
Rhizaria	**0.34**	0.02	-0.24	0.99	**0.35**	**0.01**	**0.28**	0.02	0.35	0.01	**0.34**	0
Saprotrophic fungi	0.14	0.08	-0.07	0.78	ns	-	-	-		-		-
Parasitic fungi	-0.15	0.93	0.06	0.22	ns	-	-	-	-	-	-	-
Chlorophyta	-0.25	0.98	0.22	0.04	ns	-	-	-	-	-	-	-
Site2												
Fungi	0.18	0.06	-0.04	0.61	**ns**	**-**	-	-	-	-	-	-
Basidiomycota	0.1	0.19	-0.02	0.51	**0.16**	**0.03**	0.09	0.08	**0.15**	0.03	**0.14**	0.03
Ascomycota	0.05	0.31	0.02	0.39	-	-	-	-	-	-	-	-
Ectomycorrhizal fungi	**0.24**	0	-0.12	0.96	**0.21**	**0**	**0.18**	0	**0.21**	0	**0.12**	0.02
Zygomycota	0.18	0.06	0.02	0.41	**ns**	**-**	-	-	-	-	-	-
Chytridiomycota	0.13	0.05	-0.08	0.83	**0.08**	**0.05**	0.07	0.04	0.07	0.07	0.06	0.08

Metazoa	-0.04	0.74	0.02	0.36	ns	-	-	-	-	-	-	-
Rhizaria	0.22	0.07	-0.13	0.87	**ns**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Saprotrophic fungi	**0.21**	0.04	-0.03	0.6	ns	-	-	-	-	-	-	-
Parasitic fungi	-0.07	0.83	0.05	0.22	ns	-	-	-	-	-	-	-
Chlorophyta	0.13	0.11	-0.11	0.88	ns	-	-	-	-	-	-	-
Site3												
Fungi	**0.29**	0	0.02	0.38	0.38	0	0.06	0.2	0.35	0	**0.3**	0
Basidiomycota	**0.37**	0	-0.19	0.98	**0.46**	**0**	**0.24**	0.01	**0.44**	0	**0.41**	0
Ascomycota	-0.02	0.56	-0.06	0.71	ns	-	-	-	-	-	-	-
Ectomycorrhizal fungi	**0.37**	0	-0.2	1	**0.56**	**0**	0.38	**0**	**0.55**	0	**0.5**	0
Zygomycota	**0.23**	0.02	0.07	0.21	**0.35**	**0**	0.11	0.1	**0.31**	0	**0.32**	0
Chytridiomycota	0.12	0.16	-0.03	0.64	ns	-	ns	-	-	-	-	-
Metazoa	0.06	0.33	-0.01	0.51	**ns**	**-**	-	-	-	-	-	-
Rhizaria	0.1	0.2	-0.13	0.9	**0.3**	**0**	0.12	0.09	**0.28**	0	**0.23**	0.01
Saprotrophic fungi	**0.24**	0.02	0.03	0.37	**0.34**	**0**	0.07	**0.21**	**0.3**	0	**0.29**	0
Parasitic fungi	**0.22**	0.01	-0.22	1	**0.22**	**0.01**	0.15	0.04	**0.22**	0.01	**0.22**	0.01
Chlorophyta	0.12	0.21	-0.05	0.48	ns	-	-	-	-	-	-	-

1. Species turnover component
2. Variation of species richness that results in nestedness
3. Effect of each variable (plant community, soil and neighbourhood effect)

has been controlled when testing the correlation between the target community and spatial distance.

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