Supplementary Materials

Current and future distribution of five timber forest species in Amazonas, northeast Peru: contributions towards a restoration strategy

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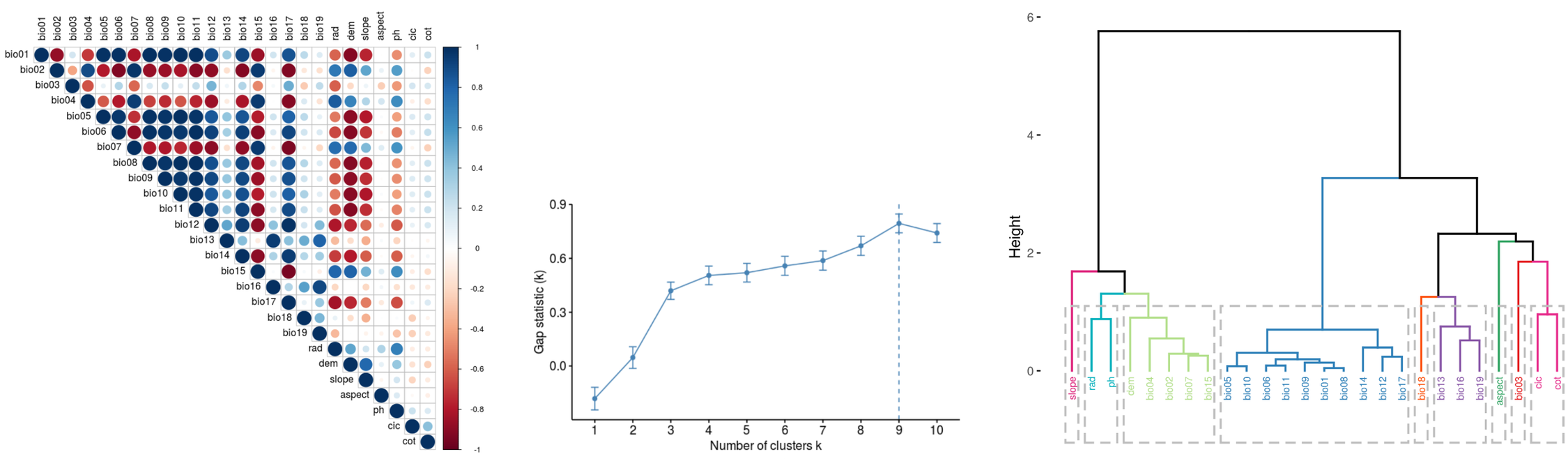
1. ***Apuleia leiocarpa***

Table S1. Pearson's correlation coefficients (r) calculated between the environmental variables for the modeling of the potential distribution of *A. leiocarpa* in Amazonas (Peru).

	bio01	bio02	bio03	bio04	bio05	bio06	bio07	bio08	bio09	bio10	bio11	bio12	bio13	bio14	bio15	bio16	bio17	bio18	bio19	rad	dem	slope	aspect	ph	cic	cot
bio01	1	-0.874	0.187	-0.707	0.988	0.990	-0.818	1.000	0.983	0.993	0.996	0.888	0.369	0.913	-0.852	0.190	0.866	0.265	0.141	-0.589	-0.915	-0.766	-0.003	-0.466	0.125	0.213
bio02	-0.874	1	-0.397	0.898	-0.794	-0.926	0.979	-0.866	-0.852	-0.822	-0.904	-0.885	-0.169	-0.917	0.955	-0.053	-0.925	-0.121	-0.161	0.713	0.826	0.527	0.091	0.554	-0.016	-0.221
bio03	0.187	-0.397	1	-0.637	0.091	0.295	-0.578	0.168	0.237	0.113	0.249	0.466	0.069	0.299	-0.485	0.048	0.497	-0.251	0.252	-0.593	-0.193	0.079	-0.245	-0.432	0.186	0.175
bio04	-0.707	0.898	-0.637	1	-0.617	-0.793	0.942	-0.690	-0.744	-0.623	-0.765	-0.859	-0.100	-0.814	0.957	0.006	-0.916	0.152	-0.149	0.835	0.662	0.292	0.188	0.627	-0.080	-0.175
bio05	0.988	-0.794	0.091	-0.617	1	0.960	-0.724	0.989	0.974	0.995	0.974	0.840	0.396	0.860	-0.780	0.203	0.802	0.268	0.105	-0.524	-0.895	-0.795	0.029	-0.416	0.155	0.208
bio06	0.990	-0.926	0.295	-0.793	0.960	1	-0.888	0.986	0.977	0.969	0.998	0.921	0.332	0.931	-0.908	0.160	0.914	0.200	0.152	-0.661	-0.911	-0.712	-0.036	-0.517	0.125	0.233
bio07	-0.818	0.979	-0.578	0.942	-0.724	-0.888	1	-0.806	-0.809	-0.754	-0.859	-0.891	-0.166	-0.883	0.958	-0.060	-0.935	-0.053	-0.203	0.769	0.776	0.448	0.137	0.591	-0.054	-0.234
bio08	1.000	-0.866	0.168	-0.690	0.989	0.986	-0.806	1	0.979	0.995	0.994	0.879	0.374	0.909	-0.839	0.197	0.856	0.281	0.142	-0.572	-0.913	-0.772	0.005	-0.456	0.121	0.210
bio09	0.983	-0.852	0.237	-0.744	0.974	0.977	-0.809	0.979	1	0.969	0.985	0.904	0.388	0.901	-0.860	0.197	0.878	0.201	0.146	-0.619	-0.893	-0.735	-0.011	-0.463	0.145	0.207
bio10	0.993	-0.822	0.113	-0.623	0.995	0.969	-0.754	0.995	0.969	1	0.980	0.845	0.390	0.875	-0.788	0.207	0.810	0.310	0.127	-0.520	-0.907	-0.801	0.027	-0.412	0.136	0.217
bio11	0.996	-0.904	0.249	-0.765	0.974	0.998	-0.859	0.994	0.985	0.980	1	0.912	0.347	0.928	-0.891	0.171	0.899	0.221	0.145	-0.637	-0.914	-0.733	-0.025	-0.499	0.126	0.219
bio12	0.888	-0.885	0.466	-0.859	0.840	0.921	-0.891	0.879	0.904	0.845	0.912	1	0.528	0.942	-0.895	0.402	0.986	0.182	0.437	-0.804	-0.758	-0.568	-0.091	-0.616	0.095	0.168
bio13	0.369	-0.169	0.069	-0.100	0.396	0.332	-0.166	0.374	0.388	0.390	0.347	0.528	1	0.421	-0.109	0.948	0.412	0.495	0.802	-0.312	-0.179	-0.363	0.030	-0.219	-0.018	-0.054
bio14	0.913	-0.917	0.299	-0.814	0.860	0.931	-0.883	0.909	0.901	0.875	0.928	0.942	0.421	1	-0.897	0.316	0.945	0.289	0.347	-0.696	-0.795	-0.604	-0.023	-0.605	-0.050	0.054
bio15	-0.852	0.955	-0.485	0.957	-0.780	-0.908	0.958	-0.839	-0.860	-0.788	-0.891	-0.895	-0.109	-0.897	1	0.029	-0.944	0.037	-0.082	0.795	0.803	0.477	0.135	0.622	-0.091	-0.179
bio16	0.190	-0.053	0.048	0.006	0.203	0.160	-0.060	0.197	0.197	0.207	0.171	0.402	0.948	0.316	0.029	1	0.294	0.541	0.907	-0.202	0.004	-0.201	0.054	-0.170	-0.123	-0.107
bio17	0.866	-0.925	0.497	-0.916	0.802	0.914	-0.935	0.856	0.878	0.810	0.899	0.986	0.412	0.945	-0.944	0.294	1	0.096	0.375	-0.831	-0.758	-0.516	-0.112	-0.647	0.066	0.158
bio18	0.265	-0.121	-0.251	0.152	0.268	0.200	-0.053	0.281	0.201	0.310	0.221	0.182	0.495	0.289	0.037	0.541	0.096	1	0.456	0.090	-0.174	-0.353	0.008	0.028	-0.247	-0.063
bio19	0.141	-0.161	0.252	-0.149	0.105	0.152	-0.203	0.142	0.146	0.127	0.145	0.437	0.802	0.347	-0.082	0.907	0.375	0.456	1	-0.327	0.005	-0.068	-0.068	-0.288	-0.236	-0.113
rad	-0.589	0.713	-0.593	0.835	-0.524	-0.661	0.769	-0.572	-0.619	-0.520	-0.637	-0.804	-0.312	-0.696	0.795	-0.202	-0.831	0.090	-0.327	1	0.525	0.192	0.306	0.685	-0.094	-0.110
dem	-0.915	0.826	-0.193	0.662	-0.895	-0.911	0.776	-0.913	-0.893	-0.907	-0.914	-0.758	-0.179	-0.795	0.803	0.004	-0.758	-0.174	0.005	0.525	1	0.786	0.103	0.387	-0.155	-0.234
slope	-0.766	0.527	0.079	0.292	-0.795	-0.712	0.448	-0.772	-0.735	-0.801	-0.733	-0.568	-0.363	-0.604	0.477	-0.201	-0.516	-0.353	-0.068	0.192	0.786	1	-0.051	0.181	-0.212	-0.107
aspect	-0.003	0.091	-0.245	0.188	0.029	-0.036	0.137	0.005	-0.011	0.027	-0.025	-0.091	0.030	-0.023	0.135	0.054	-0.112	0.008	-0.068	0.306	0.103	-0.051	1	0.158	-0.031	-0.086
ph	-0.466	0.554	-0.432	0.627	-0.416	-0.517	0.591	-0.456	-0.463	-0.412	-0.499	-0.616	-0.219	-0.605	0.622	-0.170	-0.647	0.028	-0.288	0.685	0.387	0.181	0.158	1	0.213	0.155
cic	0.125	-0.016	0.186	-0.080	0.155	0.125	-0.054	0.121	0.145	0.136	0.126	0.095	-0.018	-0.050	-0.091	-0.123	0.066	-0.247	-0.236	-0.094	-0.155	-0.212	-0.031	0.213	1	0.419
cot	0.213	-0.221	0.175	-0.175	0.208	0.233	-0.234	0.210	0.207	0.217	0.219	0.168	-0.054	0.054	-0.179	-0.107	0.158	-0.063	-0.113	-0.110	-0.234	-0.107	-0.086	0.155	0.419	1



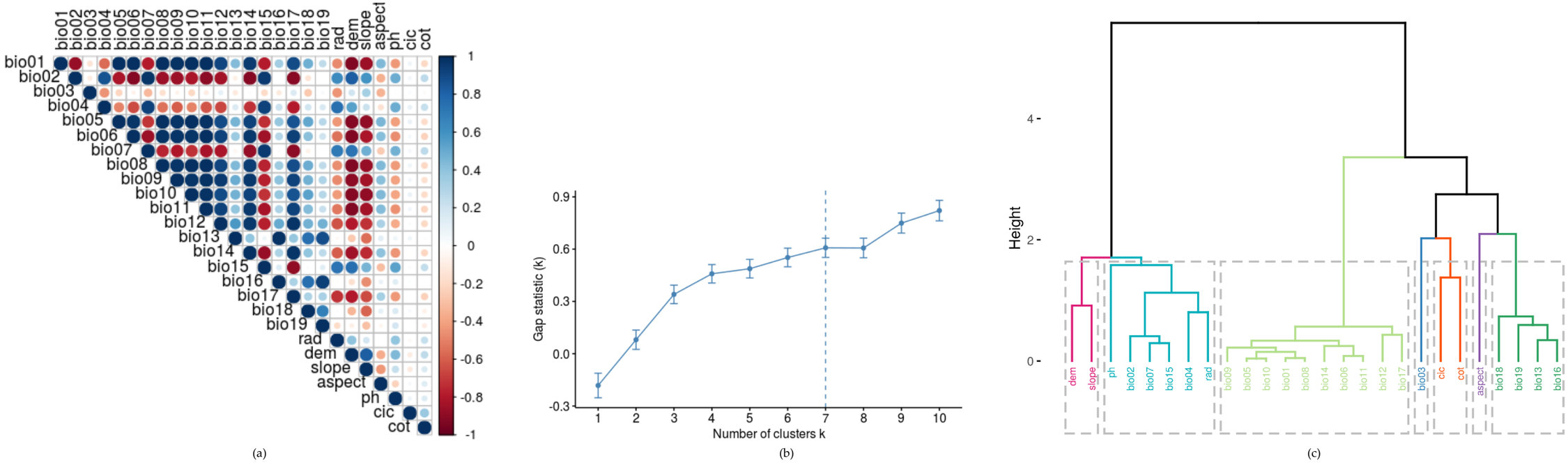
(a) (b) (c)

Figure S1. (a) Pearson's correlation coefficients (r)**, (b)** Optimal number of clusters and **(c)** Cluster dendrogram calculated between the environmental variables for the modeling of the potential distribution of *A. leiocarpa* in Amazonas (Peru).

2. ***Cariniana decandra***

Table S2. Pearson's correlation coefficients (r) calculated between the environmental variables for the modeling of the potential distribution of *C. decandra* in Amazonas (Peru).

	bio01	bio02	bio03	bio04	bio05	bio06	bio07	bio08	bio09	bio10	bio11	bio12	bio13	bio14	bio15	bio16	bio17	bio18	bio19	rad	dem	slope	aspect	ph	cic	cot
bio01	1	-0.863	-0.150	-0.566	0.994	0.992	-0.783	1.000	0.980	0.996	0.997	0.916	0.433	0.951	-0.783	0.346	0.898	0.482	0.251	-0.479	-0.923	-0.859	0.442	-0.431	0.066	-0.206
bio02	-0.863	1	-0.100	0.861	-0.813	-0.914	0.973	-0.853	-0.860	-0.820	-0.896	-0.835	-0.081	-0.916	0.955	-0.006	-0.907	-0.145	0.010	0.639	0.822	0.593	-0.358	0.498	0.058	0.268
bio03	-0.150	-0.100	1	-0.445	-0.219	-0.064	-0.329	-0.167	-0.064	-0.200	-0.097	0.106	-0.114	0.016	-0.199	-0.112	0.159	-0.270	0.036	-0.441	0.193	0.334	-0.346	-0.007	0.030	-0.028
bio04	-0.566	0.861	-0.445	1	-0.496	-0.659	0.922	-0.547	-0.607	-0.491	-0.629	-0.661	0.158	-0.728	0.930	0.216	-0.787	0.191	0.162	0.754	0.544	0.218	-0.159	0.500	0.091	0.233
bio05	0.994	-0.813	-0.219	-0.496	1	0.977	-0.718	0.996	0.970	0.998	0.985	0.896	0.469	0.927	-0.732	0.380	0.865	0.515	0.271	-0.434	-0.920	-0.884	0.455	-0.416	0.083	-0.189
bio06	0.992	-0.914	-0.064	-0.659	0.977	1	-0.851	0.989	0.979	0.978	0.999	0.929	0.369	0.970	-0.847	0.280	0.930	0.411	0.204	-0.546	-0.921	-0.816	0.423	-0.461	0.047	-0.223
bio07	-0.783	0.973	-0.329	0.922	-0.718	-0.851	1	-0.769	-0.800	-0.730	-0.827	-0.817	-0.049	-0.873	0.953	0.021	-0.898	-0.073	0.002	0.709	0.733	0.483	-0.259	0.475	0.050	0.261
bio08	1.000	-0.853	-0.167	-0.547	0.996	0.989	-0.769	1	0.979	0.997	0.995	0.912	0.444	0.946	-0.769	0.358	0.889	0.494	0.259	-0.463	-0.921	-0.865	0.448	-0.425	0.067	-0.201
bio09	0.980	-0.860	-0.064	-0.607	0.970	0.979	-0.800	0.979	1	0.972	0.983	0.953	0.498	0.964	-0.780	0.407	0.924	0.479	0.303	-0.477	-0.895	-0.832	0.414	-0.401	0.054	-0.169
bio10	0.996	-0.820	-0.200	-0.491	0.998	0.978	-0.730	0.997	0.972	1	0.986	0.898	0.476	0.927	-0.727	0.388	0.864	0.532	0.283	-0.428	-0.918	-0.885	0.450	-0.398	0.085	-0.188
bio11	0.997	-0.896	-0.097	-0.629	0.985	0.999	-0.827	0.995	0.983	0.986	1	0.927	0.393	0.966	-0.827	0.305	0.922	0.436	0.221	-0.525	-0.922	-0.831	0.432	-0.452	0.055	-0.215
bio12	0.916	-0.835	0.106	-0.661	0.896	0.929	-0.817	0.912	0.953	0.898	0.927	1	0.571	0.960	-0.775	0.506	0.973	0.477	0.473	-0.637	-0.790	-0.730	0.329	-0.375	0.020	-0.203
bio13	0.433	-0.081	-0.114	0.158	0.469	0.369	-0.049	0.444	0.498	0.476	0.393	0.571	1	0.394	0.070	0.982	0.385	0.752	0.880	-0.035	-0.267	-0.550	0.127	0.065	0.061	0.010
bio14	0.951	-0.916	0.016	-0.728	0.927	0.970	-0.873	0.946	0.964	0.927	0.966	0.960	0.394	1	-0.869	0.318	0.971	0.399	0.268	-0.605	-0.848	-0.743	0.410	-0.446	-0.009	-0.215
bio15	-0.783	0.955	-0.199	0.930	-0.732	-0.847	0.953	-0.769	-0.780	-0.727	-0.827	-0.775	0.070	-0.869	1	0.145	-0.887	0.018	0.121	0.737	0.760	0.467	-0.308	0.537	0.021	0.249
bio16	0.346	-0.006	-0.112	0.216	0.380	0.280	0.021	0.358	0.407	0.388	0.305	0.506	0.982	0.318	0.145	1	0.320	0.758	0.932	-0.011	-0.170	-0.461	0.083	0.131	0.017	-0.007
bio17	0.898	-0.907	0.159	-0.787	0.865	0.930	-0.898	0.889	0.924	0.864	0.922	0.973	0.385	0.971	-0.887	0.320	1	0.312	0.327	-0.726	-0.797	-0.651	0.337	-0.436	-0.003	-0.236
bio18	0.482	-0.145	-0.270	0.191	0.515	0.411	-0.073	0.494	0.479	0.532	0.436	0.477	0.752	0.399	0.018	0.758	0.312	1	0.685	0.014	-0.332	-0.582	0.103	0.153	0.037	-0.076
bio19	0.251	0.010	0.036	0.162	0.271	0.204	0.002	0.259	0.303	0.283	0.221	0.473	0.880	0.268	0.121	0.932	0.327	0.685	1	-0.181	-0.082	-0.296	-0.054	0.187	-0.002	-0.097
rad	-0.479	0.639	-0.441	0.754	-0.434	-0.546	0.709	-0.463	-0.477	-0.428	-0.525	-0.637	-0.035	-0.605	0.737	-0.011	-0.726	0.014	-0.181	1	0.404	0.189	0.004	0.400	-0.036	0.236
dem	-0.923	0.822	0.193	0.544	-0.920	-0.921	0.733	-0.921	-0.895	-0.918	-0.922	-0.790	-0.267	-0.848	0.760	-0.170	-0.797	-0.332	-0.082	0.404	1	0.821	-0.369	0.442	-0.107	0.256
slope	-0.859	0.593	0.334	0.218	-0.884	-0.816	0.483	-0.865	-0.832	-0.885	-0.831	-0.730	-0.550	-0.743	0.467	-0.461	-0.651	-0.582	-0.296	0.189	0.821	1	-0.431	0.236	-0.117	0.157
aspect	0.442	-0.358	-0.346	-0.159	0.455	0.423	-0.259	0.448	0.414	0.450	0.432	0.329	0.127	0.410	-0.308	0.083	0.337	0.103	-0.054	0.004	-0.369	-0.431	1	-0.225	0.033	0.140
ph	-0.431	0.498	-0.007	0.500	-0.416	-0.461	0.475	-0.425	-0.401	-0.398	-0.452	-0.375	0.065	-0.446	0.537	0.131	-0.436	0.153	0.187	0.400	0.442	0.236	-0.225	1	0.067	0.143
cic	0.066	0.058	0.030	0.091	0.083	0.047	0.050	0.067	0.054	0.085	0.055	0.020	0.061	-0.009	0.021	0.017	-0.003	0.037	-0.002	-0.036	-0.107	-0.117	0.033	0.067	1	0.379
cot	-0.206	0.268	-0.028	0.233	-0.189	-0.223	0.261	-0.201	-0.169	-0.188	-0.215	-0.203	0.010	-0.215	0.249	-0.007	-0.236	-0.076	-0.097	0.236	0.256	0.157	0.140	0.143	0.379	1



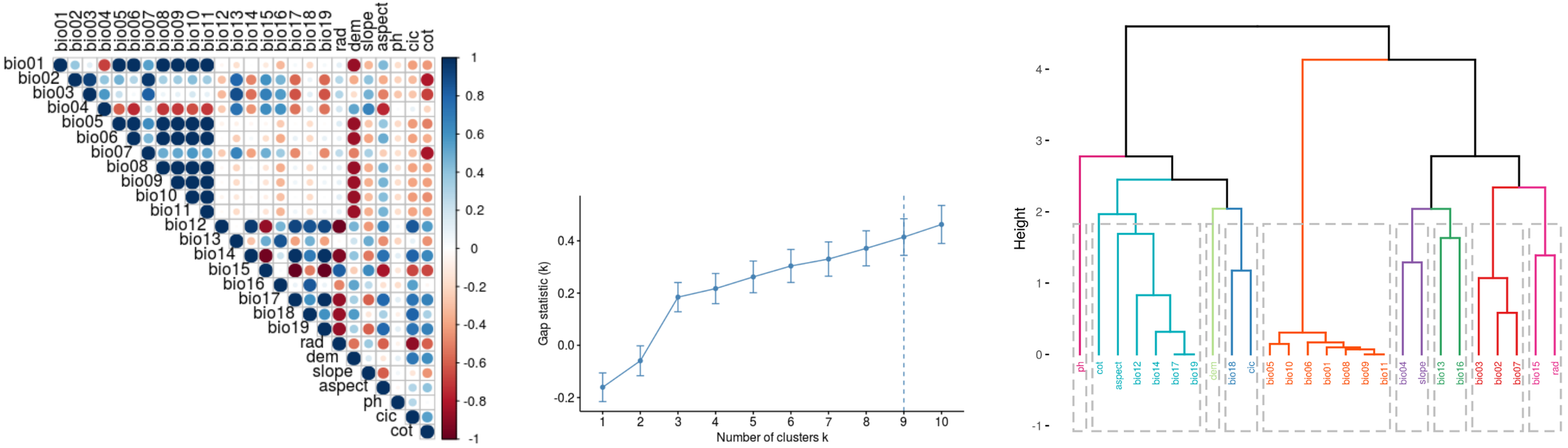
(a) (b) (c)

Figure S2. (a) Pearson's correlation coefficients (r)**, (b)** Optimal number of clusters and **(c)** Cluster dendrogram calculated between the environmental variables for the modeling of the potential distribution of *C. decandra* in Amazonas (Peru).

3. ***Cedrela montana***

Table S3. Pearson's correlation coefficients (r) calculated between the environmental variables for the modeling of the potential distribution of *C. montana* in Amazonas (Peru).

	bio01	bio02	bio03	bio04	bio05	bio06	bio07	bio08	bio09	bio10	bio11	bio12	bio13	bio14	bio15	bio16	bio17	bio18	bio19	rad	dem	slope	aspect	ph	cic	cot
bio01	1	0.380	0.128	-0.681	0.995	0.996	0.540	0.999	1.000	0.999	1.000	-0.040	-0.168	0.003	-0.116	-0.324	0.044	-0.193	0.044	0.118	-0.861	-0.338	0.448	-0.176	-0.412	-0.434
bio02	0.380	1	0.940	0.392	0.472	0.296	0.964	0.334	0.357	0.424	0.357	-0.295	0.800	-0.493	0.601	0.468	-0.574	0.087	-0.574	0.284	-0.377	0.410	-0.372	-0.223	-0.313	-0.800
bio03	0.128	0.940	1	0.571	0.221	0.047	0.815	0.078	0.104	0.173	0.104	-0.324	0.884	-0.555	0.687	0.568	-0.639	0.126	-0.639	0.290	-0.171	0.476	-0.505	-0.273	-0.275	-0.689
bio04	-0.681	0.392	0.571	1	-0.603	-0.743	0.226	-0.714	-0.701	-0.645	-0.701	-0.264	0.747	-0.446	0.627	0.609	-0.542	0.178	-0.542	0.183	0.524	0.669	-0.752	0.023	0.093	-0.211
bio05	0.995	0.472	0.221	-0.603	1	0.981	0.624	0.988	0.991	0.998	0.991	-0.069	-0.071	-0.049	-0.046	-0.256	-0.020	-0.172	-0.020	0.142	-0.862	-0.276	0.386	-0.191	-0.425	-0.503
bio06	0.996	0.296	0.047	-0.743	0.981	1	0.459	0.998	0.998	0.990	0.998	-0.015	-0.248	0.046	-0.174	-0.378	0.097	-0.208	0.097	0.097	-0.854	-0.396	0.500	-0.177	-0.404	-0.366
bio07	0.540	0.964	0.815	0.226	0.624	0.459	1	0.499	0.518	0.579	0.518	-0.252	0.670	-0.407	0.489	0.351	-0.479	0.048	-0.479	0.260	-0.503	0.329	-0.243	-0.164	-0.318	-0.821
bio08	0.999	0.334	0.078	-0.714	0.988	0.998	0.499	1	0.999	0.995	0.999	-0.033	-0.218	0.024	-0.146	-0.363	0.070	-0.212	0.070	0.112	-0.861	-0.361	0.471	-0.158	-0.407	-0.404
bio09	1.000	0.357	0.104	-0.701	0.991	0.998	0.518	0.999	1	0.997	1.000	-0.022	-0.188	0.026	-0.141	-0.332	0.068	-0.187	0.068	0.101	-0.855	-0.357	0.468	-0.175	-0.399	-0.412
bio10	0.999	0.424	0.173	-0.645	0.998	0.990	0.579	0.995	0.997	1	0.997	-0.053	-0.122	-0.022	-0.083	-0.292	0.014	-0.183	0.014	0.129	-0.862	-0.311	0.421	-0.189	-0.420	-0.464
bio11	1.000	0.357	0.104	-0.701	0.991	0.998	0.518	0.999	1.000	0.997	1	-0.022	-0.188	0.026	-0.141	-0.332	0.068	-0.187	0.068	0.101	-0.855	-0.357	0.468	-0.175	-0.399	-0.412
bio12	-0.040	-0.295	-0.324	-0.264	-0.069	-0.015	-0.252	-0.033	-0.022	-0.053	-0.022	1	-0.010	0.960	-0.872	0.466	0.919	0.866	0.919	-0.974	0.462	-0.438	0.655	0.036	0.849	0.563
bio13	-0.168	0.800	0.884	0.747	-0.071	-0.248	0.670	-0.218	-0.188	-0.122	-0.188	-0.010	1	-0.281	0.491	0.863	-0.402	0.480	-0.402	-0.028	0.206	0.499	-0.470	-0.218	0.108	-0.453
bio14	0.003	-0.493	-0.555	-0.446	-0.049	0.046	-0.407	0.024	0.026	-0.022	0.026	0.960	-0.281	1	-0.970	0.211	0.990	0.695	0.990	-0.929	0.392	-0.530	0.742	0.129	0.805	0.642
bio15	-0.116	0.601	0.687	0.627	-0.046	-0.174	0.489	-0.146	-0.141	-0.083	-0.141	-0.872	0.491	-0.970	1	0.025	-0.993	-0.512	-0.993	0.829	-0.247	0.631	-0.821	-0.139	-0.667	-0.665
bio16	-0.324	0.468	0.568	0.609	-0.256	-0.378	0.351	-0.363	-0.332	-0.292	-0.332	0.466	0.863	0.211	0.025	1	0.084	0.841	0.084	-0.497	0.529	0.263	-0.159	-0.172	0.547	-0.041
bio17	0.044	-0.574	-0.639	-0.542	-0.020	0.097	-0.479	0.070	0.068	0.014	0.068	0.919	-0.402	0.990	-0.993	0.084	1	0.602	1.000	-0.880	0.331	-0.593	0.785	0.129	0.736	0.680
bio18	-0.193	0.087	0.126	0.178	-0.172	-0.208	0.048	-0.212	-0.187	-0.183	-0.187	0.866	0.480	0.695	-0.512	0.841	0.602	1	0.602	-0.864	0.563	-0.135	0.323	-0.081	0.806	0.325
bio19	0.044	-0.574	-0.639	-0.542	-0.020	0.097	-0.479	0.070	0.068	0.014	0.068	0.919	-0.402	0.990	-0.993	0.084	1.000	0.602	1	-0.880	0.331	-0.593	0.785	0.129	0.736	0.680
rad	0.118	0.284	0.290	0.183	0.142	0.097	0.260	0.112	0.101	0.129	0.101	-0.974	-0.028	-0.929	0.829	-0.497	-0.880	-0.864	-0.880	1	-0.545	0.360	-0.594	-0.069	-0.881	-0.595
dem	-0.861	-0.377	-0.171	0.524	-0.862	-0.854	-0.503	-0.861	-0.855	-0.862	-0.855	0.462	0.206	0.392	-0.247	0.529	0.331	0.563	0.331	-0.545	1	0.166	-0.130	0.124	0.726	0.616
slope	-0.338	0.410	0.476	0.669	-0.276	-0.396	0.329	-0.361	-0.357	-0.311	-0.357	-0.438	0.499	-0.530	0.631	0.263	-0.593	-0.135	-0.593	0.360	0.166	1	-0.603	0.058	-0.130	-0.446
aspect	0.448	-0.372	-0.505	-0.752	0.386	0.500	-0.243	0.471	0.468	0.421	0.468	0.655	-0.470	0.742	-0.821	-0.159	0.785	0.323	0.785	-0.594	-0.130	-0.603	1	-0.048	0.300	0.401
ph	-0.176	-0.223	-0.273	0.023	-0.191	-0.177	-0.164	-0.158	-0.175	-0.189	-0.175	0.036	-0.218	0.129	-0.139	-0.172	0.129	-0.081	0.129	-0.069	0.124	0.058	-0.048	1	0.286	0.026
cic	-0.412	-0.313	-0.275	0.093	-0.425	-0.404	-0.318	-0.407	-0.399	-0.420	-0.399	0.849	0.108	0.805	-0.667	0.547	0.736	0.806	0.736	-0.881	0.726	-0.130	0.300	0.286	1	0.548
cot	-0.434	-0.800	-0.689	-0.211	-0.503	-0.366	-0.821	-0.404	-0.412	-0.464	-0.412	0.563	-0.453	0.642	-0.665	-0.041	0.680	0.325	0.680	-0.595	0.616	-0.446	0.401	0.026	0.548	1



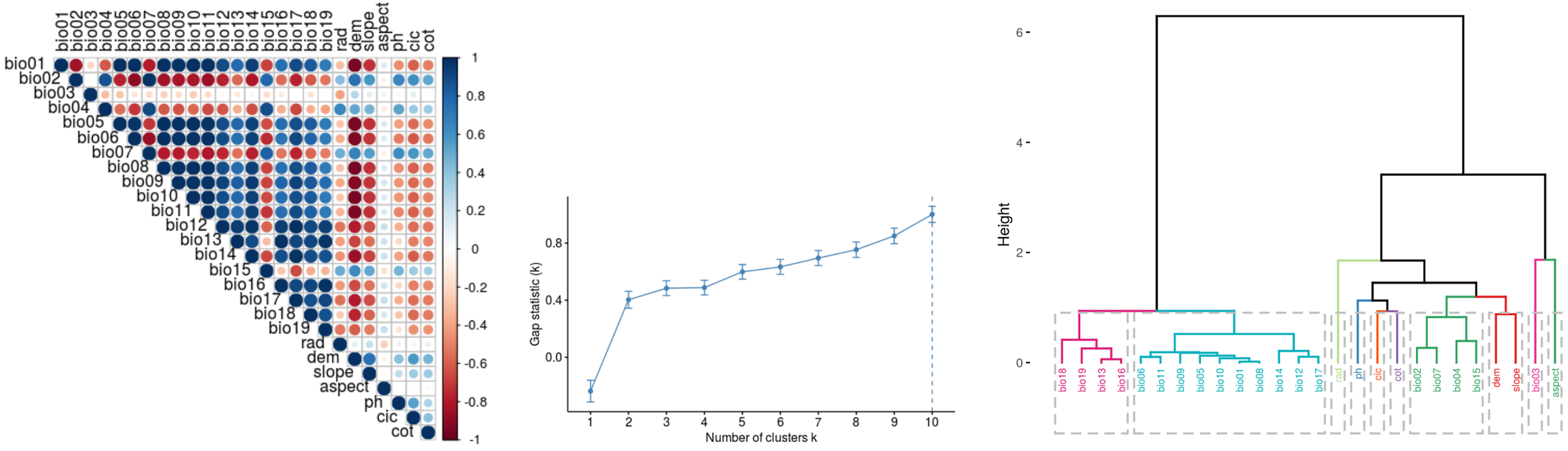
(a) (b) (c)

Figure S3. (a) Pearson's correlation coefficients (r), **(b)** Optimal number of clusters and **(c)** Cluster dendrogram calculated between the environmental variables for the modeling of the potential distribution of *C. montana* in Amazonas (Peru).

4. *Cedrelinga cateniformis*

Table S4. Pearson's correlation coefficients (r) calculated between the environmental variables for the modeling of the potential distribution of *C. cateniformis* in Amazonas (Peru).

	bio01	bio02	bio03	bio04	bio05	bio06	bio07	bio08	bio09	bio10	bio11	bio12	bio13	bio14	bio15	bio16	bio17	bio18	bio19	rad	dem	slope	aspect	ph	cic	cot
bio01	1	0.380	0.128	-0.681	0.995	0.996	0.540	0.999	1.000	0.999	1.000	-0.040	-0.168	0.003	-0.116	-0.324	0.044	-0.193	0.044	0.118	-0.861	-0.338	0.448	-0.176	-0.412	-0.434
bio02	0.380	1	0.940	0.392	0.472	0.296	0.964	0.334	0.357	0.424	0.357	-0.295	0.800	-0.493	0.601	0.468	-0.574	0.087	-0.574	0.284	-0.377	0.410	-0.372	-0.223	-0.313	-0.800
bio03	0.128	0.940	1	0.571	0.221	0.047	0.815	0.078	0.104	0.173	0.104	-0.324	0.884	-0.555	0.687	0.568	-0.639	0.126	-0.639	0.290	-0.171	0.476	-0.505	-0.273	-0.275	-0.689
bio04	-0.681	0.392	0.571	1	-0.603	-0.743	0.226	-0.714	-0.701	-0.645	-0.701	-0.264	0.747	-0.446	0.627	0.609	-0.542	0.178	-0.542	0.183	0.524	0.669	-0.752	0.023	0.093	-0.211
bio05	0.995	0.472	0.221	-0.603	1	0.981	0.624	0.988	0.991	0.998	0.991	-0.069	-0.071	-0.049	-0.046	-0.256	-0.020	-0.172	-0.020	0.142	-0.862	-0.276	0.386	-0.191	-0.425	-0.503
bio06	0.996	0.296	0.047	-0.743	0.981	1	0.459	0.998	0.998	0.990	0.998	-0.015	-0.248	0.046	-0.174	-0.378	0.097	-0.208	0.097	0.097	-0.854	-0.396	0.500	-0.177	-0.404	-0.366
bio07	0.540	0.964	0.815	0.226	0.624	0.459	1	0.499	0.518	0.579	0.518	-0.252	0.670	-0.407	0.489	0.351	-0.479	0.048	-0.479	0.260	-0.503	0.329	-0.243	-0.164	-0.318	-0.821
bio08	0.999	0.334	0.078	-0.714	0.988	0.998	0.499	1	0.999	0.995	0.999	-0.033	-0.218	0.024	-0.146	-0.363	0.070	-0.212	0.070	0.112	-0.861	-0.361	0.471	-0.158	-0.407	-0.404
bio09	1.000	0.357	0.104	-0.701	0.991	0.998	0.518	0.999	1	0.997	1.000	-0.022	-0.188	0.026	-0.141	-0.332	0.068	-0.187	0.068	0.101	-0.855	-0.357	0.468	-0.175	-0.399	-0.412
bio10	0.999	0.424	0.173	-0.645	0.998	0.990	0.579	0.995	0.997	1	0.997	-0.053	-0.122	-0.022	-0.083	-0.292	0.014	-0.183	0.014	0.129	-0.862	-0.311	0.421	-0.189	-0.420	-0.464
bio11	1.000	0.357	0.104	-0.701	0.991	0.998	0.518	0.999	1.000	0.997	1	-0.022	-0.188	0.026	-0.141	-0.332	0.068	-0.187	0.068	0.101	-0.855	-0.357	0.468	-0.175	-0.399	-0.412
bio12	-0.040	-0.295	-0.324	-0.264	-0.069	-0.015	-0.252	-0.033	-0.022	-0.053	-0.022	1	-0.010	0.960	-0.872	0.466	0.919	0.866	0.919	-0.974	0.462	-0.438	0.655	0.036	0.849	0.563
bio13	-0.168	0.800	0.884	0.747	-0.071	-0.248	0.670	-0.218	-0.188	-0.122	-0.188	-0.010	1	-0.281	0.491	0.863	-0.402	0.480	-0.402	-0.028	0.206	0.499	-0.470	-0.218	0.108	-0.453
bio14	0.003	-0.493	-0.555	-0.446	-0.049	0.046	-0.407	0.024	0.026	-0.022	0.026	0.960	-0.281	1	-0.970	0.211	0.990	0.695	0.990	-0.929	0.392	-0.530	0.742	0.129	0.805	0.642
bio15	-0.116	0.601	0.687	0.627	-0.046	-0.174	0.489	-0.146	-0.141	-0.083	-0.141	-0.872	0.491	-0.970	1	0.025	-0.993	-0.512	-0.993	0.829	-0.247	0.631	-0.821	-0.139	-0.667	-0.665
bio16	-0.324	0.468	0.568	0.609	-0.256	-0.378	0.351	-0.363	-0.332	-0.292	-0.332	0.466	0.863	0.211	0.025	1	0.084	0.841	0.084	-0.497	0.529	0.263	-0.159	-0.172	0.547	-0.041
bio17	0.044	-0.574	-0.639	-0.542	-0.020	0.097	-0.479	0.070	0.068	0.014	0.068	0.919	-0.402	0.990	-0.993	0.084	1	0.602	1.000	-0.880	0.331	-0.593	0.785	0.129	0.736	0.680
bio18	-0.193	0.087	0.126	0.178	-0.172	-0.208	0.048	-0.212	-0.187	-0.183	-0.187	0.866	0.480	0.695	-0.512	0.841	0.602	1	0.602	-0.864	0.563	-0.135	0.323	-0.081	0.806	0.325
bio19	0.044	-0.574	-0.639	-0.542	-0.020	0.097	-0.479	0.070	0.068	0.014	0.068	0.919	-0.402	0.990	-0.993	0.084	1.000	0.602	1	-0.880	0.331	-0.593	0.785	0.129	0.736	0.680
rad	0.118	0.284	0.290	0.183	0.142	0.097	0.260	0.112	0.101	0.129	0.101	-0.974	-0.028	-0.929	0.829	-0.497	-0.880	-0.864	-0.880	1	-0.545	0.360	-0.594	-0.069	-0.881	-0.595
dem	-0.861	-0.377	-0.171	0.524	-0.862	-0.854	-0.503	-0.861	-0.855	-0.862	-0.855	0.462	0.206	0.392	-0.247	0.529	0.331	0.563	0.331	-0.545	1	0.166	-0.130	0.124	0.726	0.616
slope	-0.338	0.410	0.476	0.669	-0.276	-0.396	0.329	-0.361	-0.357	-0.311	-0.357	-0.438	0.499	-0.530	0.631	0.263	-0.593	-0.135	-0.593	0.360	0.166	1	-0.603	0.058	-0.130	-0.446
aspect	0.448	-0.372	-0.505	-0.752	0.386	0.500	-0.243	0.471	0.468	0.421	0.468	0.655	-0.470	0.742	-0.821	-0.159	0.785	0.323	0.785	-0.594	-0.130	-0.603	1	-0.048	0.300	0.401
ph	-0.176	-0.223	-0.273	0.023	-0.191	-0.177	-0.164	-0.158	-0.175	-0.189	-0.175	0.036	-0.218	0.129	-0.139	-0.172	0.129	-0.081	0.129	-0.069	0.124	0.058	-0.048	1	0.286	0.026
cic	-0.412	-0.313	-0.275	0.093	-0.425	-0.404	-0.318	-0.407	-0.399	-0.420	-0.399	0.849	0.108	0.805	-0.667	0.547	0.736	0.806	0.736	-0.881	0.726	-0.130	0.300	0.286	1	0.548
cot	-0.434	-0.800	-0.689	-0.211	-0.503	-0.366	-0.821	-0.404	-0.412	-0.464	-0.412	0.563	-0.453	0.642	-0.665	-0.041	0.680	0.325	0.680	-0.595	0.616	-0.446	0.401	0.026	0.548	1



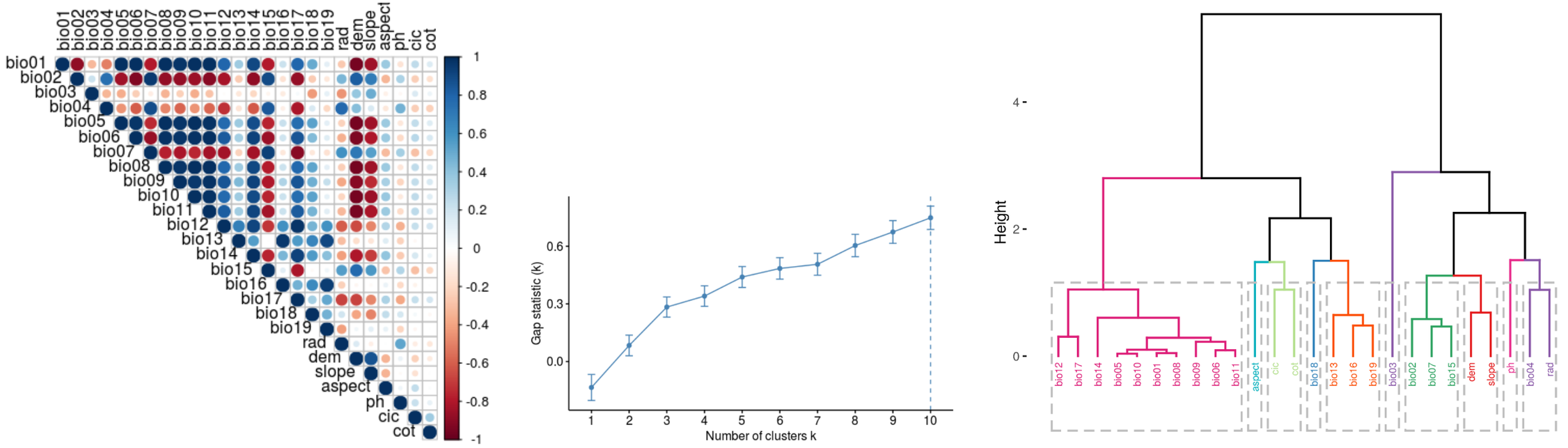
(a) (b) (c)

Figure S4. (a) Pearson's correlation coefficients (r)**, (b)** Optimal number of clusters and **(c)** Cluster dendrogram calculated between the environmental variables for the modeling of the potential distribution of *C. cateniformis* in Amazonas (Peru).

5. *Ceiba pentandra*

Table S5. Pearson's correlation coefficients (r) calculated between the environmental variables for the modeling of the potential distribution of *C. pentandra* in Amazonas (Peru).

	bio01	bio02	bio03	bio04	bio05	bio06	bio07	bio08	bio09	bio10	bio11	bio12	bio13	bio14	bio15	bio16	bio17	bio18	bio19	rad	dem	slope	aspect	ph	cic	cot
bio01	1	-0.880	-0.329	-0.505	0.996	0.991	-0.793	1.000	0.980	0.997	0.997	0.796	0.351	0.908	-0.800	0.217	0.798	0.506	0.117	-0.263	-0.950	-0.841	0.367	-0.149	0.256	0.144
bio02	-0.880	1	0.218	0.758	-0.844	-0.926	0.951	-0.872	-0.871	-0.853	-0.906	-0.820	-0.255	-0.886	0.897	-0.153	-0.871	-0.252	-0.124	0.452	0.826	0.694	-0.333	0.313	-0.247	-0.166
bio03	-0.329	0.218	1	-0.340	-0.367	-0.244	-0.096	-0.345	-0.237	-0.362	-0.280	-0.019	-0.124	-0.208	-0.054	-0.106	0.038	-0.425	0.107	-0.442	0.387	0.494	-0.080	-0.037	0.151	0.075
bio04	-0.505	0.758	-0.340	1	-0.449	-0.610	0.882	-0.484	-0.587	-0.445	-0.572	-0.724	-0.150	-0.612	0.843	-0.082	-0.816	0.168	-0.203	0.788	0.420	0.166	-0.126	0.471	-0.249	-0.238
bio05	0.996	-0.844	-0.367	-0.449	1	0.978	-0.743	0.997	0.973	0.998	0.988	0.774	0.361	0.888	-0.762	0.225	0.767	0.530	0.114	-0.227	-0.951	-0.848	0.361	-0.128	0.246	0.138
bio06	0.991	-0.926	-0.244	-0.610	0.978	1	-0.866	0.987	0.980	0.980	0.998	0.836	0.338	0.924	-0.859	0.206	0.853	0.433	0.135	-0.357	-0.934	-0.804	0.367	-0.199	0.277	0.163
bio07	-0.793	0.951	-0.096	0.882	-0.743	-0.866	1	-0.779	-0.813	-0.755	-0.835	-0.830	-0.220	-0.837	0.932	-0.122	-0.901	-0.120	-0.159	0.602	0.718	0.549	-0.312	0.333	-0.300	-0.194
bio08	1.000	-0.872	-0.345	-0.484	0.997	0.987	-0.779	1	0.977	0.998	0.994	0.787	0.354	0.904	-0.786	0.219	0.785	0.520	0.114	-0.242	-0.951	-0.847	0.369	-0.138	0.252	0.137
bio09	0.980	-0.871	-0.237	-0.587	0.973	0.980	-0.813	0.977	1	0.969	0.985	0.860	0.445	0.923	-0.805	0.306	0.859	0.486	0.230	-0.385	-0.902	-0.748	0.328	-0.220	0.247	0.164
bio10	0.997	-0.853	-0.362	-0.445	0.998	0.980	-0.755	0.998	0.969	1	0.989	0.771	0.353	0.894	-0.763	0.220	0.765	0.539	0.108	-0.214	-0.953	-0.859	0.376	-0.112	0.254	0.132
bio11	0.997	-0.906	-0.280	-0.572	0.988	0.998	-0.835	0.994	0.985	0.989	1	0.824	0.347	0.919	-0.838	0.213	0.833	0.465	0.130	-0.323	-0.942	-0.815	0.363	-0.183	0.268	0.159
bio12	0.796	-0.820	-0.019	-0.724	0.774	0.836	-0.830	0.787	0.860	0.771	0.824	1	0.683	0.918	-0.711	0.607	0.978	0.463	0.603	-0.609	-0.651	-0.481	0.300	-0.354	0.231	0.186
bio13	0.351	-0.255	-0.124	-0.150	0.361	0.338	-0.220	0.354	0.445	0.353	0.347	0.683	1	0.554	-0.003	0.970	0.561	0.655	0.907	-0.301	-0.180	-0.138	0.131	-0.220	-0.032	-0.009
bio14	0.908	-0.886	-0.208	-0.612	0.888	0.924	-0.837	0.904	0.923	0.894	0.919	0.918	0.554	1	-0.763	0.454	0.921	0.565	0.419	-0.414	-0.806	-0.695	0.393	-0.259	0.178	0.072
bio15	-0.800	0.897	-0.054	0.843	-0.762	-0.859	0.932	-0.786	-0.805	-0.763	-0.838	-0.711	-0.003	-0.763	1	0.120	-0.812	-0.022	0.066	0.559	0.771	0.574	-0.288	0.296	-0.302	-0.201
bio16	0.217	-0.153	-0.106	-0.082	0.225	0.206	-0.122	0.219	0.306	0.220	0.213	0.607	0.970	0.454	0.120	1	0.472	0.631	0.942	-0.235	-0.043	-0.029	0.089	-0.190	-0.062	0.005
bio17	0.798	-0.871	0.038	-0.816	0.767	0.853	-0.901	0.785	0.859	0.765	0.833	0.978	0.561	0.921	-0.812	0.472	1	0.335	0.510	-0.670	-0.671	-0.486	0.315	-0.380	0.231	0.180
bio18	0.506	-0.252	-0.425	0.168	0.530	0.433	-0.120	0.520	0.486	0.539	0.465	0.463	0.655	0.565	-0.022	0.631	0.335	1	0.474	0.199	-0.397	-0.493	0.245	0.170	0.044	-0.039
bio19	0.117	-0.124	0.107	-0.203	0.114	0.135	-0.159	0.114	0.230	0.108	0.130	0.603	0.907	0.419	0.066	0.942	0.510	0.474	1	-0.414	0.057	0.116	0.097	-0.211	-0.042	0.001
rad	-0.263	0.452	-0.442	0.788	-0.227	-0.357	0.602	-0.242	-0.385	-0.214	-0.323	-0.609	-0.301	-0.414	0.559	-0.235	-0.670	0.199	-0.414	1	0.154	-0.080	0.003	0.526	-0.095	-0.128
dem	-0.950	0.826	0.387	0.420	-0.951	-0.934	0.718	-0.951	-0.902	-0.953	-0.942	-0.651	-0.180	-0.806	0.771	-0.043	-0.671	-0.397	0.057	0.154	1	0.866	-0.341	0.084	-0.236	-0.108
slope	-0.841	0.694	0.494	0.166	-0.848	-0.804	0.549	-0.847	-0.748	-0.859	-0.815	-0.481	-0.138	-0.695	0.574	-0.029	-0.486	-0.493	0.116	-0.080	0.866	1	-0.347	-0.021	-0.154	0.004
aspect	0.367	-0.333	-0.080	-0.126	0.361	0.367	-0.312	0.369	0.328	0.376	0.363	0.300	0.131	0.393	-0.288	0.089	0.315	0.245	0.097	0.003	-0.341	-0.347	1	0.062	0.245	0.015
ph	-0.149	0.313	-0.037	0.471	-0.128	-0.199	0.333	-0.138	-0.220	-0.112	-0.183	-0.354	-0.220	-0.259	0.296	-0.190	-0.380	0.170	-0.211	0.526	0.084	-0.021	0.062	1	0.223	0.099
cic	0.256	-0.247	0.151	-0.249	0.246	0.277	-0.300	0.252	0.247	0.254	0.268	0.231	-0.032	0.178	-0.302	-0.062	0.231	0.044	-0.042	-0.095	-0.236	-0.154	0.245	0.223	1	0.353
cot	0.144	-0.166	0.075	-0.238	0.138	0.163	-0.194	0.137	0.164	0.132	0.159	0.186	-0.009	0.072	-0.201	0.005	0.180	-0.039	0.001	-0.128	-0.108	0.004	0.015	0.099	0.353	1



(a) (b) (c)

Figure S5. (a) Pearson's correlation coefficients (r)**, (b)** Optimal number of clusters and **(c)** Cluster dendrogram calculated between the environmental variables for the modeling of the potential distribution of *C. pentandra* in Amazonas (Peru).