

1 **Supplement materials**

2 **Main drivers of plant diversity patterns of rubber plantations in the**
3 **Greater Mekong Sub-region**

4 Guoyu Lan^{a,c##}, Bangqian Chen^{a,c#}, Chuan Yang^{a,c}, Rui Sun^{a,c}, Zhixiang Wu^{a,c}, Xicai
5 Zhang^{a,c}

6

7 **Figure S1.** Rubber plantations in the GMS (a: Rubber plantation in China; b: Rubber
8 plantation in Thailand; c: Houses of local farmers of rubber plantation in Myanmar; d:
9 Rubber plantation in Laos; d: Kids collecting rubber latex in Cambodia; f: An example of
10 lower diversity of Vietnam due to higher agricultural intensity; g: Rubber plantation in
11 Myanmar; h: Tropical trees replaced by rubber trees).

12 **Figure S2** Two exotic species (a-j: *Chromolaena odorata*; k-t: *Mimosa pudica*) in rubber
13 plantations in the Greater Mekong Sub-region (a, k: relationship between the exotic species
14 importance value and species richness; b-j, l-t: relationship between the exotic species
15 importance value and environmental variables)

16 **Figure S3** Linear regressions of latitude and longitude with four environmental variables
17 (temperature, rainfall, elevation, and slope degree)

18 **Table S1** Rubber plantation sampling plot information in GMS

19 **Table S2** Plant species composition of rubber plantations in GMS

20 **Table S3** Classification of plant uses of rubber plantations in GMS

21 **Table S4** Statistics of the dominant families (20+ species) of rubber plantations in GMS

22 **Table S5** The 20 most important plants species of rubber plantations in GMS

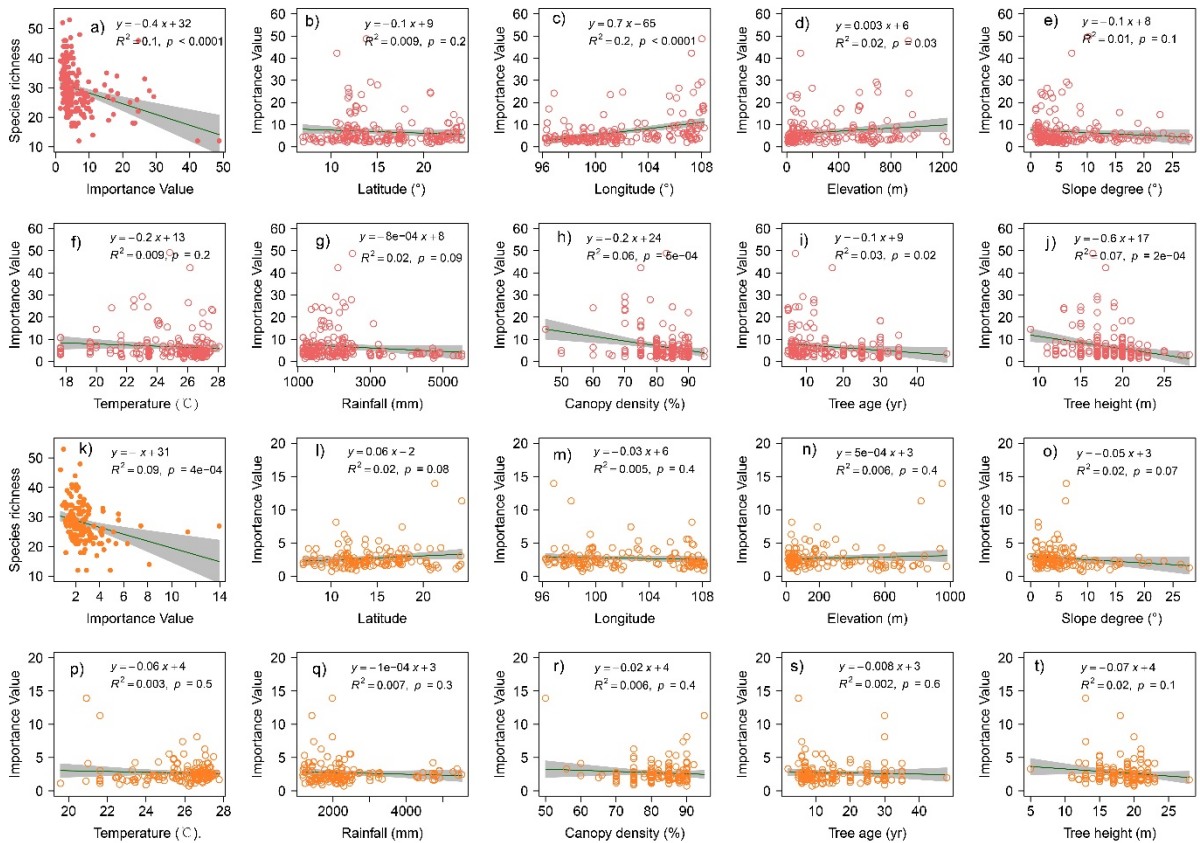
23

24 **Figure S1.** Rubber plantations in GMS (a: Rubber plantation in China; b: Rubber plantation
25 in Thailand; c: Houses of local farmers of rubber plantation in Myanmar; d: Rubber
26 plantation in Laos; d: Kids collecting rubber latex in Cambodia; f: An example of lower
27 diversity of Vietnam due to higher agricultural intensity; g: Rubber plantation in Myanmar; h:
28 Tropical trees replaced by rubber trees).



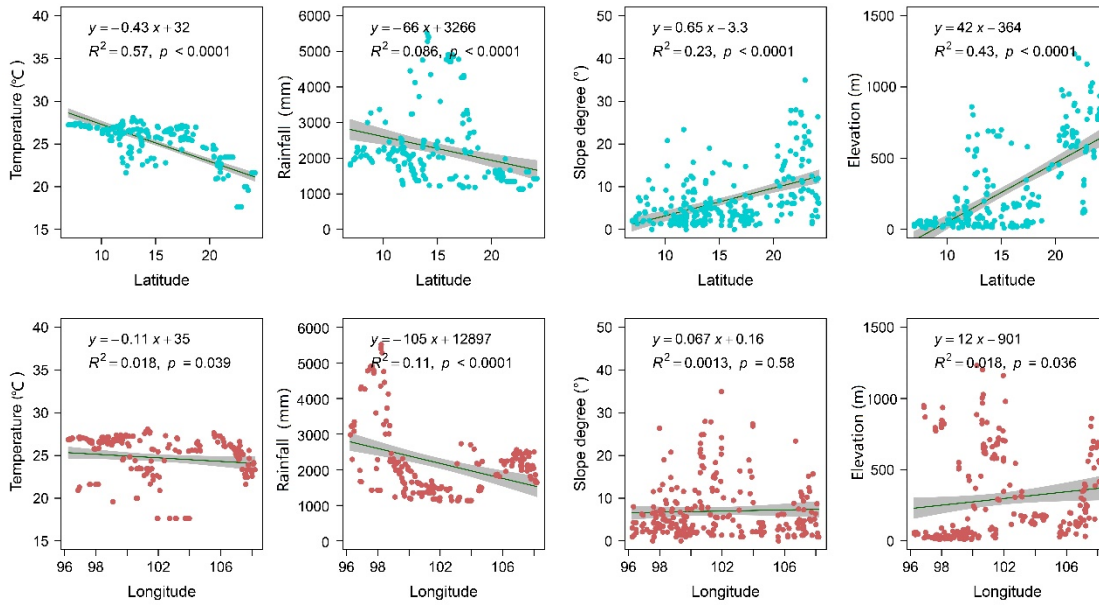
29
30

31 **Figure S2** Two exotic species (a-j: *Chromolaena odorata*; k-t: *Mimosa pudica*) in rubber
 32 plantations in the Greater Mekong Sub-region (a, k: relationship between the exotic species
 33 importance value and species richness; b-j, l-t: relationship between the exotic species
 34 importance value and environmental variables)



35
 36
 37

38 **Figure S3** Linear regressions of latitude and longitude with four environmental variables
 39 (temperature, rainfall, elevation, and slope degree)



40

41

Table S1 Rubber plantation sampling plot information in the GMS

Rank	Country	Plot ID	Latitude(N)	Longitude(E)	Elevation (m)	Slope degree(°)	Slope Aspect (°)	Age (y)	Tree height (m)	Canopy density (%)
1	Vietnam	V-1	16.342948	107.44458	161	10.2425	110.9987	7	13	75
2	Vietnam	V-2	15.931458	107.53619	605	15.1784	276.8540	8	12	75
3	Vietnam	V-3	15.510139	107.81271	153	15.6455	318.7126	7	13	75
4	Vietnam	V-4	15.001925	107.72389	699	6.7538	82.1435	12	17	78
5	Vietnam	V-5	14.828810	107.68197	655	4.6274	0.0000	30	20	80
6	Vietnam	V-6	14.585139	107.91567	656	5.1247	111.1619	30	21	80
7	Vietnam	V-7	14.240301	107.99256	689	6.3539	244.1435	9	17	70
8	Vietnam	V-8	13.782267	108.01258	690	3.8143	90.0000	7	13	75
9	Vietnam	V-9	13.511755	108.10154	415	0.9538	90.0000	11	15	70
10	Vietnam	V-10	12.774367	108.19602	665	0.9274	0.0000	7	12	80
11	Vietnam	V-11	12.722258	108.07891	563	8.6890	257.7694	30	20	75
12	Vietnam	V-12	12.687833	108.12555	549	0.9274	0.0000	8	14	75
13	Vietnam	V-13	12.636037	108.12470	557	1.8543	180.0000	30	21	75
14	Vietnam	V-14	12.576387	107.82847	387	15.6867	36.1984	10	17	75
15	Vietnam	V-15	12.521630	107.76159	512	1.3275	314.3105	30	20	80
16	Vietnam	V-16	12.389089	107.56846	805	12.4439	48.6832	5	11	80
17	Vietnam	V-17	12.267680	107.60432	861	5.0821	291.3488	23	17	80
18	Vietnam	V-18	11.980023	107.60984	651	11.5538	103.7422	7	17	80
19	Vietnam	V-19	11.912743	107.37941	560	1.8543	0.0000	7	15	85
20	Vietnam	V-20	11.703632	107.09588	290	10.4294	243.9134	30	20	90
21	Vietnam	V-21	11.597348	106.89584	162	2.9854	251.9167	12	17	85
22	Vietnam	V-22	11.709915	106.90248	127	7.4744	210.2667	15	20	85
23	Vietnam	V-23	11.739493	106.80315	114	4.2113	116.0837	10	18	85
24	Vietnam	V-24	11.698201	106.71316	102	23.3842	346.7394	6	11	60
25	Vietnam	V-25	11.634915	106.60809	134	1.3253	314.4053	30	21	90
26	Vietnam	V-26	11.292276	106.62995	50	0.9457	90.0000	14	17	80
27	Vietnam	V-27	10.936756	107.12353	145	1.3236	314.4749	6	15	80
28	Vietnam	V-28	10.941693	107.17088	218	2.8317	90.0000	15	20	80
29	Vietnam	V-29	10.924503	107.23340	201	2.9359	18.7516	9	17	85
30	Vietnam	V-30	10.776478	107.22241	225	3.3589	34.1622	13	20	75
31	Vietnam	V-31	10.612115	107.23592	107	7.2792	129.3202	17	18	75
32	Vietnam	V-32	10.540392	107.20427	32	1.3227	45.4875	30	20	90
33	Cambodia	C-1	13.692500	104.53601	147	1.3308	134.1742	10	19	85
34	Cambodia	C-2	13.730606	105.81002	133	6.2341	207.2353	12	21	86
35	Cambodia	C-3	13.409915	106.20800	198	1.3299	225.7918	30	20	89
36	Cambodia	C-4	13.619879	106.88098	249	3.9222	283.6565	25	21	90
37	Cambodia	C-5	13.716288	106.95302	301	5.0024	337.6210	12	21	90
38	Cambodia	C-6	13.674008	107.32999	245	2.1215	64.0882	20	21	80
39	Cambodia	C-7	13.672392	107.26199	254	4.7239	11.6309	15	20	80
40	Cambodia	C-8	13.704619	107.12900	355	10.7651	339.4795	20	20	80
41	Cambodia	C-9	13.743891	107.07900	353	4.6767	142.3280	15	20	90

42	Cambodia	C-10	13.754304	107.03098	348	11.4526	80.8043	15	18	90
43	Cambodia	C-11	12.774098	107.15302	400	3.9788	314.2821	6	17	88
44	Cambodia	C-12	12.638416	107.21199	386	9.3394	53.8023	7	17	90
45	Cambodia	C-13	12.121001	106.58798	115	8.8234	121.4277	12	19	85
46	Cambodia	C-14	11.838012	106.28901	196	2.9368	18.8077	12	19	70
47	Cambodia	C-15	11.812519	106.20499	119	0.9475	90.0000	6	17	89
48	Cambodia	C-16	11.798605	106.11702	77	3.8959	256.2489	12	17	90
49	Cambodia	C-17	11.782985	105.96101	51	6.2242	152.9437	7	16	85
50	Cambodia	C-18	11.780696	105.91002	47	2.6498	225.6098	15	17	75
51	Cambodia	C-19	11.985903	105.66101	68	3.3919	56.8903	6	15	75
52	Cambodia	C-20	11.976881	105.61500	102	2.7803	0.0000	5	12	80
53	Cambodia	C-21	11.928901	105.60499	43	0.0000	0.0000	20	20	85
54	Cambodia	C-22	11.945508	105.56500	29	2.6506	134.3729	5	15	70
55	Cambodia	C-23	11.924502	105.57901	56	5.9971	308.0516	5	17	80
56	Cambodia	C-24	11.919790	105.57802	52	0.9478	90.0000	6	15	75
57	Laos	L-1	21.065882	101.64301	722	15.9287	322.5681	12	20	85
58	Laos	L-2	20.982982	101.48601	676	15.3148	130.5595	10	20	85
59	Laos	L-3	20.905918	101.43399	590	14.8779	31.4541	15	20	83
60	Laos	L-4	20.999993	101.39700	606	11.7026	303.1649	13	20	80
61	Laos	L-5	20.805783	101.25199	661	6.1708	306.7903	15	80	80
62	Laos	L-6	20.387381	100.81599	624	17.1149	153.3417	9	18	80
63	Laos	L-7	20.323916	100.51999	455	11.1932	205.8605	8	18	80
64	Laos	L-8	20.324589	100.17802	370	1.9774	270.0000	12	20	83
65	Laos	L-9	20.376699	100.78502	659	19.6237	177.2240	10	19	88
66	Laos	L-10	20.699589	101.09202	710	7.8209	298.1263	13	20	87
67	Laos	L-11	20.976115	101.67699	792	11.7867	94.4493	9	20	85
68	Laos	L-12	20.784015	101.91698	708	13.9482	224.1973	10	20	75
69	Laos	L-13	20.712695	102.05998	702	5.5475	180.0000	8	19	85
70	Laos	L-14	20.575891	102.09400	979	10.0966	180.0000	7	19	70
71	Laos	L-15	20.541196	102.37901	392	5.6620	119.3296	9	21	85
72	Thailand	T-1	11.814493	99.71940	67	2.9368	341.1938	6	12	60
73	Thailand	T-2	11.763282	99.68251	88	0.9473	90.0000	7	12	85
74	Thailand	T-3	11.753183	99.68228	71	0.9473	90.0000	8	15	85
75	Thailand	T-4	11.725221	99.67290	155	5.7394	80.7317	35	17	89
76	Thailand	T-5	11.415616	99.59660	19	1.8917	90.0000	6	17	75
77	Thailand	T-6	11.413192	99.59359	30	4.7223	191.5320	7	21	75
78	Thailand	T-7	11.366289	99.53920	21	2.9363	161.2219	23	21	89
79	Thailand	T-8	11.067680	99.45962	11	1.3239	45.5378	9	19	90
80	Thailand	T-9	11.007896	99.46958	69	2.1041	296.1418	12	21	90
81	Thailand	T-10	10.549817	99.24759	19	2.0802	153.0422	16	21	88
82	Thailand	T-11	10.451792	99.14602	32	1.3225	225.4793	30	22	75
83	Thailand	T-12	10.064404	99.05378	41	3.8220	194.2467	15	23	85
84	Thailand	T-13	10.060589	99.01298	68	9.1748	246.3653	9	20	90
85	Thailand	T-14	9.588148	99.13112	28	1.3208	134.5970	25	22	89
86	Thailand	T-15	9.559108	99.14871	16	1.3207	225.4006	13	20	85
87	Thailand	T-16	8.987609	99.38691	45	4.6481	322.7898	25	23	90

88	Thailand	T-17	8.891155	99.38700	79	1.3194	314.6537	28	23	90
89	Thailand	T-18	8.763687	99.36379	46	0.0000	0.0000	28	23	88
90	Thailand	T-19	8.460410	99.53511	53	11.5606	298.3477	30	23	82
91	Thailand	T-20	8.368130	99.54440	51	5.8519	341.3803	35	23	80
92	Thailand	T-21	7.997439	99.92299	10	2.0893	63.6583	10	18	82
93	Thailand	T-22	7.916739	99.94629	18	1.8543	0.0000	20	22	85
94	Thailand	T-23	6.949414	100.39499	34	2.0761	206.7344	25	21	85
95	Thailand	T-24	6.976299	100.36002	21	1.8682	270.0000	25	22	88
96	Thailand	T-25	7.255743	100.13798	48	2.0864	296.3812	7	19	85
97	Thailand	T-26	7.302017	100.04099	42	2.9520	288.2954	7	15	83
98	Thailand	T-27	7.414764	99.94678	58	1.3170	225.2406	30	22	89
99	Thailand	T-28	7.546901	99.76429	61	7.4366	172.8134	14	22	85
100	Thailand	T-29	7.581281	99.59499	32	3.7048	180.0000	14	23	85
101	Thailand	T-30	7.680114	99.31590	19	6.7258	163.9177	15	22	85
102	Thailand	T-31	8.120913	98.79880	59	4.1490	26.7967	30	21	82
103	Thailand	T-32	8.140751	98.78421	39	3.8208	345.8266	25	22	85
104	Thailand	T-33	8.220015	98.80428	35	7.4545	210.0004	28	22	89
105	Thailand	T-34	8.535231	98.50019	33	2.0777	153.1789	20	20	70
106	Thailand	T-35	8.836801	98.38830	24	9.4804	258.8209	30	22	80
107	Thailand	T-36	9.650715	98.55670	20	4.6935	270.0000	9	20	75
108	Thailand	T-37	10.190302	98.71972	69	20.7653	328.6328	12	19	85
109	Thailand	T-38	10.188686	98.71779	108	14.8496	68.5108	16	21	88
110	Thailand	T-39	10.535410	98.87322	43	5.4599	120.5357	15	22	88
111	Thailand	T-40	10.514898	99.06321	50	0.9432	90.0000	15	23	85
112	Thailand	T-41	10.808883	99.20558	61	2.6453	225.5128	6	15	80
113	Thailand	T-42	13.268622	101.13098	80	2.0845	27.1902	5	13	70
114	Thailand	T-43	13.049682	101.22299	95	1.8543	180.0000	30	22	90
115	Thailand	T-44	12.921989	101.31702	36	1.3286	45.7348	6	20	90
116	Thailand	T-45	12.895911	101.46999	75	3.9798	134.2682	35	20	88
117	Thailand	T-46	12.796809	101.45100	81	1.3282	134.2795	28	22	90
118	Thailand	T-47	13.638101	101.44499	21	2.6598	225.8192	20	20	92
119	Thailand	T-48	13.611620	101.46002	49	1.3305	225.8160	35	20	90
120	Thailand	T-49	13.882087	102.47102	117	6.0030	252.0686	25	19	87
121	Thailand	T-50	14.254080	102.70302	307	4.8621	79.0297	8	15	70
122	Thailand	T-51	15.172706	103.19202	142	0.9609	90.0000	6	15	87
123	Thailand	T-52	15.229977	103.23901	172	2.1336	295.7545	15	19	92
124	Thailand	T-53	16.135408	104.45701	181	2.0903	332.5028	6	12	85
125	Thailand	T-54	16.234106	104.51002	159	3.8280	165.4053	35	22	89
126	Thailand	T-55	16.431009	104.59898	180	4.2817	64.3785	7	15	85
127	Thailand	T-56	16.676790	104.66298	170	3.3860	34.8356	6	15	86
128	Thailand	T-57	17.501610	104.70100	173	2.0935	152.3334	7	15	87
129	Thailand	T-58	17.608298	104.47501	160	2.9167	270.0000	17	20	89
130	Thailand	T-59	17.585093	104.35401	175	4.3032	115.4841	25	19	82
131	Thailand	T-60	17.808298	104.16998	174	2.1568	295.4564	28	23	88
132	Thailand	T-61	17.995596	103.94498	175	2.1587	295.4330	18	20	85
133	Thailand	T-62	18.364985	103.33901	171	0.9772	90.0000	25	22	80

134	Thailand	T-63	18.071807	103.09202	177	3.4610	237.6343	7	15	90
135	Thailand	T-64	17.712203	102.63201	189	1.3445	46.3907	6	13	89
136	Thailand	T-65	17.319384	101.97999	347	1.3429	133.6712	7	15	80
137	Thailand	T-66	17.317678	101.70001	287	5.4607	212.1490	9	16	86
138	Thailand	T-67	17.381502	101.58798	293	5.5819	240.2045	25	22	85
139	Thailand	T-68	17.414312	101.54000	580	14.7506	157.2559	25	18	85
140	Thailand	T-69	17.037921	100.81900	221	3.0515	107.6773	12	18	88
141	Thailand	T-70	17.881098	100.04400	246	7.4415	187.4826	6	15	90
142	Thailand	T-71	18.462696	100.12999	229	3.7048	180.0000	9	16	90
143	Thailand	T-72	19.388504	99.77941	425	7.5469	31.2068	7	19	90
144	Thailand	T-73	19.687381	99.72780	454	5.6332	169.9618	15	16	83
145	Myanmar	M-1	17.324186	96.24620	52	3.0558	252.3483	9	20	90
146	Myanmar	M-2	17.326296	96.24660	58	0.9274	0.0000	15	20	85
147	Myanmar	M-3	17.395416	96.32519	44	4.2995	64.4927	9	13	85
148	Myanmar	M-4	17.393621	96.32430	47	8.0082	313.6596	10	14	82
149	Myanmar	M-5	17.426296	96.90172	21	2.1531	115.5035	30	20	85
150	Myanmar	M-6	17.416691	96.95212	26	3.8823	270.0000	15	20	88
151	Myanmar	M-7	17.220282	97.17919	30	2.6836	313.6866	30	20	82
152	Myanmar	M-8	16.241512	97.73619	28	2.9428	160.8535	32	19	85
153	Myanmar	M-9	16.210497	97.74409	24	2.9428	199.1436	22	19	88
154	Myanmar	M-10	16.131817	97.74440	17	6.7422	196.5638	26	21	85
155	Myanmar	M-11	16.038190	97.75939	15	5.4505	31.9765	30	21	85
156	Myanmar	M-12	15.982894	97.69678	44	2.0900	152.5208	6	15	80
157	Myanmar	M-13	15.963684	97.65450	24	0.9274	0.0000	30	20	80
158	Myanmar	M-14	16.008612	97.63008	32	2.0900	207.4822	32	20	82
159	Myanmar	M-15	16.013684	97.63291	31	0.9648	270.0000	8	15	75
160	Myanmar	M-16	16.010004	97.62479	39	4.1745	332.5176	15	19	85
161	Myanmar	M-17	15.257221	97.88812	10	3.0268	72.1730	7	17	78
162	Myanmar	M-18	14.985318	97.99611	90	3.8265	194.5099	14	20	85
163	Myanmar	M-19	14.168712	98.21388	27	7.2129	292.5646	20	17	80
164	Myanmar	M-20	14.168083	98.21402	29	6.0308	232.2005	20	17	80
165	Myanmar	M-21	14.173200	98.20989	15	2.0862	27.2801	2	5	10
166	Myanmar	M-22	14.077419	98.28350	33	19.0031	147.7878	35	17	75
167	Myanmar	M-23	12.571495	98.76729	38	12.0265	8.9576	7	17	82
168	Myanmar	M-24	12.568802	98.76931	22	6.8725	254.4179	20	19	70
169	Myanmar	M-25	12.483614	98.42802	18	4.6678	217.5301	7	17	70
170	Myanmar	M-26	12.479215	98.43188	21	8.7518	198.8499	48	20	65
171	Myanmar	M-27	12.685409	98.75630	34	2.9964	288.0144	20	20	75
172	Myanmar	M-28	12.921809	98.67591	22	3.4005	303.0152	20	21	82
173	Myanmar	M-29	13.299906	98.59701	14	4.6735	142.3797	13	20	55
174	Myanmar	M-30	13.621315	98.38278	38	5.0021	202.3709	30	18	66
175	Myanmar	M-31	14.042320	98.22789	20	5.0034	202.4074	25	20	80
176	Myanmar	M-32	14.042006	98.22699	17	3.4117	237.1074	8	19	80
177	Myanmar	M-33	14.369385	98.18659	62	13.1978	86.0418	7	17	82
178	Myanmar	M-34	15.101386	97.91110	38	3.9995	226.0066	16	20	82
179	Myanmar	M-35	18.726520	96.36842	61	1.3486	46.5574	30	23	83

180	Myanmar	M-36	15.816018	97.76608	22	5.8375	279.1102	9	21	88
181	Myanmar	M-37	16.457715	97.54359	18	6.4649	0.0000	25	21	80
182	Myanmar	M-38	16.383119	97.55019	25	0.0000	0.0000	35	20	80
183	Myanmar	M-39	16.961978	97.34651	25	2.0922	207.5979	15	20	78
184	Myanmar	M-40	17.395820	96.98121	60	3.9904	256.5820	7	17	80
185	Myanmar	M-41	17.709420	96.49912	49	1.9465	270.0000	6	12	70
186	Myanmar	M-42	17.787606	96.49328	47	2.6880	133.5972	8	19	82
187	Myanmar	M-43	17.921897	96.49238	52	4.3098	115.4422	6	15	82
188	Myanmar	M-44	18.726520	96.36842	61	1.3486	46.5574	8	19	85
189	Myanmar	M-45	20.737202	96.88471	938	3.5018	121.9426	5	13	60
190	Myanmar	M-46	21.260496	96.86159	950	6.2899	28.2142	5	13	50
191	Myanmar	M-47	21.706591	96.94732	870	6.0386	98.8022	6	12	50
192	China	Y-1	24.101653	97.99279	820	26.3821	105.1345	30	17	87
193	China	Y-2	24.064983	97.99054	796	2.9595	200.0553	35	18	90
194	China	Y-3	24.079481	98.05271	844	7.3093	104.6199	7	15	85
195	China	Y-4	24.099992	98.07681	936	6.3193	151.2885	6	13	75
196	China	Y-5	23.901922	97.62932	772	4.4529	245.4339	35	17	88
197	China	Y-6	23.895594	97.61541	777	7.9602	117.5848	10	18	85
198	China	Y-7	23.900621	97.59741	796	11.5234	217.4397	8	17	85
199	China	Y-8	24.105019	98.01312	847	11.9257	112.5340	25	17	75
200	China	Y-9	24.184283	98.16868	822	6.1468	278.6450	30	18	95
201	China	Y-10	22.662291	103.79620	120	16.3450	116.2044	10	17	85
202	China	Y-11	22.662784	103.79561	141	11.0707	99.5244	10	17	85
203	China	Y-12	22.578808	103.90688	130	14.9234	148.2482	11	17	90
204	China	Y-13	22.533117	103.96092	117	27.3787	66.0242	18	17	85
205	China	Y-14	22.535181	103.99467	191	9.0099	84.1404	23	17	80
206	China	Y-15	22.572793	103.96909	125	26.8712	352.0452	25	16	80
207	China	Y-16	22.729885	103.72322	129	18.9396	256.3570	11	17	89
208	China	Y-17	22.607578	103.15908	309	11.4835	217.1718	30	17	90
209	China	Y-18	22.651115	103.14310	347	16.3899	303.3925	25	18	89
210	China	Y-19	22.641599	103.09961	314	7.2363	255.2277	7	18	85
211	China	Y-20	22.763278	102.72968	544	9.4770	39.1232	30	17	89
212	China	Y-21	22.916195	101.95899	1161	34.9324	205.3258	12	17	85
213	China	Y-22	22.909822	101.94032	773	20.3282	264.9865	12	17	85
214	China	Y-23	22.869113	101.97218	561	24.2088	20.5904	15	17	89
215	China	Y-24	22.869786	101.97021	581	21.7181	12.7408	7	17	89
216	China	Y-25	23.562919	99.10109	506	3.1709	106.9900	25	23	80
217	China	Y-26	23.561303	99.10329	507	1.8543	180.0000	9	18	90
218	China	Y-27	23.561303	99.10329	507	1.8543	180.0000	9	20	85
219	China	Y-28	23.554301	99.10728	516	1.3723	47.4891	6	13	85
220	China	Y-29	23.542317	99.10630	551	8.8119	19.9811	7	14	80
221	China	Y-30	23.544517	99.10630	549	12.5155	18.5535	17	21	80
222	China	Y-31	23.418709	100.67088	1028	19.7335	79.6005	5	10	50
223	China	Y-32	23.255513	100.61981	967	22.8254	180.0000	6	9	45
224	China	Y-33	23.250217	100.60320	1004	16.0165	142.1378	6	14	60
225	China	Y-34	23.209014	100.59341	824	20.5812	260.0703	25	23	85

226	China	Y-35	23.220998	100.59530	847	9.1911	258.4578	25	23	90
227	China	Y-36	21.917812	101.25230	581	6.1004	40.7721	20	22	90
228	China	Y-37	21.599679	101.58592	678	3.7048	180.0000	25	27	90
229	China	Y-38	21.569113	101.57959	692	18.3209	87.1978	18	17	80
230	China	Y-39	21.404122	101.37209	579	12.3232	287.2414	30	28	90
231	China	Y-40	21.602821	101.28682	590	27.8640	203.2783	20	20	80
232	China	Y-41	22.069113	100.91011	831	27.9695	58.7867	30	25	80
233	China	Y-42	22.019786	100.81648	612	24.8706	225.7004	20	20	95
234	China	Y-43	22.077417	100.71402	620	17.5786	235.8014	35	20	85
235	China	Y-44	22.137515	100.62802	1203	21.4003	18.1889	25	25	75
236	China	Y-45	21.935181	100.69391	678	7.5809	328.3659	20	20	85
237	China	Y-46	21.781007	100.25661	886	11.8840	180.0000	7	18	85
238	China	Y-47	21.771313	100.26491	1231	8.1230	312.8820	30	22	90
239	China	Y-48	21.627102	100.69732	647	8.1394	256.9167	30	22	95
240	China	Y-49	21.573691	100.67779	663	24.8457	140.2755	6	18	90
241	China	Y-50	23.565208	99.10679	510	7.4783	317.7244	18	15	80
242	China	Y-51	23.536482	99.10832	568	13.4709	47.4853	7	17	85
243	China	Y-52	23.250621	100.60468	980	8.5246	166.4033	8	17	55
244	China	Y-53	21.917812	101.25230	581	6.1004	40.7721	7	17	75
245	China	Y-54	21.977506	101.17788	890	8.8004	199.7712	12	22	85
246	China	Y-55	22.012919	101.02851	858	14.9158	280.5045	10	18	80
247	China	Y-56	22.045101	100.73601	584	4.1016	103.0464	20	15	90

43

44

45 **Table S2** Plant species composition of rubber plantations in the GMS

Taxa	Total	Vietnam (%)	Cambodia	Laos	Thailand	Myanmar	China
No. of families	153	89 (58.17)	70 (45.75)	73 (47.71)	101 (66.01)	81 (52.94)	102 (66.67)
No. of genera	550	211 (38.36)	171 (31.09)	167 (30.36)	284 (51.64)	224 (40.73)	275 (50.00)
No. of species	949	294 (30.98)	224 (23.60)	235 (24.76)	388 (40.89)	283 (29.82)	387 (40.78)

46

47

48 **Table S3** Classification of plant uses of rubber plantations in GMS

Type of use	Number of species						
	All regions	Vietnam	Cambodia	Laos	Thailand	Myanmar	China
Medicinal plant	597 (62.91)	191(31.99)	140(23.45)	165(27.64)	258(43.22)	185(30.99)	258(43.22)
Edible plants	163 (17.18)	51(31.29)	42(25.77)	47(28.83)	77(47.24)	47(28.83)	66(40.49)
Economic plant	220 (23.18)	67(30.45)	62(28.18)	53(24.09)	95(43.18)	74(33.64)	79(35.91)
Forage plant	64 (6.75)	24(37.50)	22(34.38)	12(18.75)	30(46.88)	30(46.88)	22(34.38)
Ornamental plant	158 (16.65)	58(36.71)	43(27.22)	28(17.72)	71(44.94)	45(28.48)	45(28.48)
Ecological plant	62 (6.53)	18(29.03)	18(29.03)	10(16.13)	25(40.32)	25(40.32)	29(46.77)
Others	170 (17.91)	47(27.65)	35(20.59)	36(21.18)	53(31.18)	39(22.94)	66(38.82)
Total	949 (100)	456(31.80)	362(25.24)	351(24.48)	609(42.47)	445(31.03)	565(39.40)

49 Note: The number in brackets is percentage.

50

51

52 **Table S4** Statistics of the dominant families (20+ species) of rubber plantations in the GMS

Rank	Family	Genera	Species
1	Fabaceae	28 (5.09)	59 (6.22)
2	Euphorbiaceae	24 (4.36)	51 (5.37)
3	Poaceae	36 (6.55)	50 (5.27)
4	Rubiaceae	17 (3.09)	37 (3.90)
5	Compositae	23 (4.18)	34 (3.58)
6	Liliaceae	11 (2.00)	23 (2.42)
7	Moraceae	6 (1.09)	23 (2.42)
8	Cyperaceae	7 (1.27)	22 (2.32)
9	Araceae	12 (2.18)	21 (2.21)
	Total	163 (29.82)	318 (33.72)

53

54

55 **Table S5** The 20 most important plant species of rubber plantations in the GMS

Rank	Species	Families	Relative height (%)	Relative coverage (%)	Relative frequency (%)	Importance Value
1	<i>Cyrtococcum patens</i>	Poaceae	1.66	9.97	2.49	4.71
2	<i>Chromolaena odorata</i>	Compositae	4.12	5.66	2.74	4.17
3	<i>Asystasia chelonoides</i>	Acanthaceae	0.65	6.16	0.87	2.56
4	<i>Axonopus compressus</i>	Poaceae	0.97	4.84	1.65	2.49
5	<i>Ficus hispida</i>	Moraceae	2.06	1.30	1.52	1.63
6	<i>Mimosa pudica</i>	Mimosaceae	1.56	1.24	2.04	1.61
7	<i>Centotheca lappacea</i>	Poaceae	1.28	1.85	1.67	1.60
8	<i>Argyreia seguinii</i>	Convolvulaceae	1.61	1.83	1.26	1.57
9	<i>Aporusa dioica</i>	Euphorbiaceae	1.89	1.01	1.65	1.52
10	<i>Paspalum conjugatum</i>	Poaceae	0.95	1.75	1.36	1.35
11	<i>Ageratum conyzoides</i>	Compositae	0.97	1.82	1.25	1.34
12	<i>Lygodium japonicum</i>	Desmodiaceae	1.43	1.02	1.55	1.33
13	<i>Urena lobata</i>	Malvaceae	1.36	0.94	1.61	1.30
14	<i>Dioscorea opposita</i>	Dioscoreaceae	1.47	1.02	1.27	1.26
15	<i>Melastoma candidum</i>	Melastomataceae	1.28	1.14	1.14	1.19
16	<i>Miscanthus sinensis</i>	Poaceae	1.03	1.56	0.57	1.05
17	<i>Borreria latifolia</i>	Rubiaceae	0.58	1.48	1.03	1.03
18	<i>Cyclosorus parasiticus</i>	Athyriaceae	0.70	1.53	0.87	1.03
19	<i>Microcos paniculata</i>	Tiliaceae	1.28	0.72	0.99	0.99
20	<i>Erioglossum rubiginosum</i>	Sapindaceae	1.18	0.75	1.00	0.98
	Total		28.03	47.59	28.53	34.71

56 Note: Species names in bold are exotic species.

57