

Supporting information:

Table S1. Regression analysis between plant diversity and environmental variables (2012&2019).

	β -Coefficient	t value	Pr(> t)	Multiple R2	Cohen's F2
Year-2012					
Shannon Index (Intercept)	3.47	5.94	0.00	0.01	0.01
pH	0.01	0.18	0.87		
OM	0.02	0.22	0.83		
TN	-0.16	-0.46	0.66		
TP	-1.75	-0.35	0.74		
Simpson Index (Intercept)	0.93	18.6	0.00	0.01	0.01
pH	0.01	0.43	0.67		
OM	0.01	0.67	0.52		
TN	-0.02	-0.47	0.65		
TP	0.06	0.13	0.91		
Species Richness (Intercept)	109.54	3.99	0.01	0.05	0.05
pH	-6.64	-1.37	0.18		
OM	-2.92	-1.3	0.21		
TN	-0.42	-0.03	0.98		
TP	31.28	0.13	0.90		
Pielou's Evenness (Intercept)	0.71	6.03	0.00	0.04	0.04
pH	0.03	1.09	0.29		
OM	0.02	1.29	0.21		
TN	-0.04	-0.52	0.62		
TP	-0.46	-0.45	0.66		
Year-2019					
Shannon Index (Intercept)	4.49	4.69	0.00	0.27	0.38
pH	-0.19	-1.0163	0.31		
OM	0.00	0.0943	0.92		
TN	2.8	1.0494	0.29		
TP	-34.66	-4.1638	0.00***		
Simpson Index (Intercept)	1.14	9.44	0.00	0.21	0.27
pH	-0.03	-1.47	0.14		
OM	-0.00	-0.16	0.86		
TN	0.30	0.89	0.37		
TP	-3.53	-3.35	0.00***		

Species Richness (Intercept)	44.66	1.25	0.21	0.37	0.59
pH	3.77	0.53	0.59		
OM	2.42	0.74	0.46		
TN	101.89	1.02	0.30		
TP	-1,651.79	-5.35	0.00***		
Pielou's Evenness (Intercept)	0.90	8.29	0.00	0.07	0.08
pH	-0.01	-0.87	0.38		
OM	-0.00	-0.39	0.69		
TN	-0.00	-0.01	0.98		
TP	1.81	1.91	0.06		

Note: Significant codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1. OM: organic matter; TN: total nitrogen; TP: total phosphorus and pH, Pr(>|t|): p-value for the t-test.

Table S2. Species IVIs for year 2012

Species	Dominanc e	Frequency	Density	Relative dominance	Relative frequency	Relative density	IVI
<i>Schefflera octophylla</i>	24.77	1037	63	30.274	11.010	10.500	51.783
<i>Acronychia oligophlebia</i>	11.08	772	64	13.541	8.196	10.667	32.404
<i>Syzygium buxifolium</i>	9.58	1458	64	11.708	15.479	10.667	37.854
<i>Acmena acuminatissima</i>	8.30	1069	62	10.140	11.349	10.333	31.823
<i>Olea dioica</i>	7.68	1664	63	9.388	17.666	10.500	37.554
<i>Eiacocarpus sylvestri</i>	5.36	176	48	6.546	1.869	8.000	16.415
<i>Syzygium buxifolioideum</i>	4.36	372	54	5.325	3.949	9.000	18.275
<i>Xantolis longispinosa</i>	3.59	1854	64	4.389	19.684	10.667	34.739
<i>Prunus phaeocosticta</i>	3.56	308	55	4.357	3.270	9.167	16.793
<i>Litsea variabilis</i>	3.54	709	63	4.331	7.527	10.500	22.359

Table S3. Species IVIs for year 2019

Species	Dominanc e	Frequenc y	Densit y	Relative dominanc e	Relative frequenc y	Relative density	IVI
<i>Hydnocarpus hainanensis</i>	2163.01	1198	53	89.457	11.029	9.532	110.018
<i>Acmena acuminatissima</i>	58.12	1156	61	2.404	10.643	10.971	24.018
<i>Antirhea chinensis</i>	35.29	304	39	1.460	2.799	7.014	11.273
<i>Camellia furfuracea</i>	34.96	1061	58	1.446	9.768	10.432	21.646
<i>Schefflera octophylla</i>	23.96	1165	61	0.991	10.725	10.971	22.688
<i>Koilolepas hainanense</i>	23.90	1193	56	0.988	18.348	10.072	29.409
<i>Olea dioica</i>	21.83	1268	62	0.903	11.674	11.151	23.728
<i>Syzygium buxifolium</i>	19.16	1114	48	0.793	10.256	8.633	19.682
<i>Litsea verticillata</i>	18.97	989	61	0.785	9.105	10.971	20.861
<i>Aeronychia oligophlebia</i>	18.73	614	57	0.774	5.653	10.252	16.679

Equations for Calculation

$$\text{Frequency (F)} = \frac{\text{No. of Quadrats in which species occurred}}{\text{Total number of quadrat studied}} \times 100$$

$$\text{Relative Frequency (R.F)} = \frac{\text{Frequency of occurrence of species}}{\text{Total frequency of occurrence of all species}} \times 100$$

$$\text{Relative Density (R. Den.)} = \frac{\text{Number of individuals of the species}}{\text{Total number of individuals of all species}} \times 100$$

$$\text{Relative Dominance (R.D.)} = \frac{\text{Total Basal area of a specie}}{\text{Total Basal area of all species}} \times 100$$

(Panwar and Bhardwaj,2012)

Figure 2, scientific names

Dominant species in 2012 (Figure 2A)

Sp1. *Xantolis longispinosa*,

Sp2. *Stertulia lanceolata*,

Sp3. *Hydnocarpus hainanensis*
Sp4. *Antirhea chinesis*
Sp5. *Syzygium tephrodes*
Sp6. *Schefflera octophylla*
Sp7. *Lithocarpus corneus*
Sp8. *Arytera littoralis*
Sp9. *Cleistanthus saichikii*
Sp10. *Hydnocarpus hainanensis*
Sp11. *Bridelia balansae*
Sp12. *Litsea verticillate*
Sp13. *Prunus phacostica*
Sp14. *Aporosa yunnanensis*
Sp15. *Mallotus hookerianus*
Sp16. *Antirhea chinensis*
Sp17. *Syzygium odoratum*
Sp18. *Camellia furfuracea*
Sp19. *Dillenia turbinata*
Sp20. *Olea dioica*

Dominant species in 2019 (Figure 2B).

Sp21. *Arytera littoralis*
Sp22. *Stertulia lanceolata*
Sp23. *Litsea variabilis*
Sp24. *Syzygium claviflorum*
Sp25. *Syzygium championii*
Sp26. *Bridelia balansae*
Sp27. *Acmena acuminatissima*
Sp28. *Hydnocarpus hainanensis*
Sp29. *Camellia furfuracea*
Sp30. *Aeronychia oligophlebia*

- Sp31. *Drypetes arcuatinervia*
- Sp32. *Koilocpas hainanense*
- Sp33. *Oncodostigma hainanense*
- Sp34. *Mallotus hookerianus*
- Sp35. *Eiacocarpus sylvestri*
- Sp36. *Casaria aequilateralis*
- Sp37. *Olea dioica*
- Sp38. *Syzygium buxifolium*
- Sp39. *Ancistrocladus tectorius*
- Sp40. *Psychotria rubra*
- Sp41. *Antirhea chinensis*
- Sp42. *Syzygium odoratum*
- Sp43. *Laurocerasus phaeosticta*
- Sp44. *Syzygium championii*
- Sp45. *Dillenia turbinata*
- Sp46. *Syzygium claviflorum*
- Sp47. *Cudrania cochinchinensis*
- Sp48. *Xantolis longispinosa*
- Sp49. *Syzygium tephrodes*