Supplementary Material

Size dependent associations between tree diameter growth rates and functional traits in an Asian tropical seasonal rainforest

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Table S1. The detailed information of species, genus, family，species relative density (RA), relative frequency (RF), relative dominance (RD) and mean stem diameter at breast height (DBH) at different class of tree species in the present study

Species	Genus	Family	RA	RF	RD	Mean DBH 5-10	Mean DBH 10-20	Mean DBH > 20
Gironniera subaequalis	*Gironniera*	*Ulmaceae*	1.69	1.15	4.26	7.58	12.83	23.97
Cleidion brevipetiolatum	*Cleidion*	*Euphorbiaceae*	2.54	1.00	1.03	7.05	14.23	24.13
Dichapetalum gelonioides	*Dichapetalum*	*Dichapetalaceae*	1.31	1.15	0.68	6.87	13.53	-
Aidia pycnantha	*Aidia*	*Rubiaceae*	2.09	1.10	0.42	6.28	10.97	-
Pometia tomentosa	*Pometia*	*Sapindaceae*	1.97	1.26	13.39	6.85	16.53	75.83
Walsura robusta	*Walsura*	*Meliaceae*	1.55	0.58	1.95	6.4	12.40	23.60
Pseuduvaria indochinensis	*Pseuduvaria*	*Annonaceae*	1.22	1.05	0.93	6.93	12.90	29.43
Pouteria grandifolia	*Pouteria*	*Sapotaceae*	0.30	0.58	1.95	9.7	13.32	65.75
Baccaurea ramiflora	*Baccaurea*	*Euphorbiaceae*	2.30	1.31	0.94	6.33	13.55	27.65
Ardisia thyrsiflora	*Ardisia*	*Rubiaceae*	6.32	1.26	2.22	8.27	14.10	-
Ficus langkokensis	*Ficus*	*Moraceae*	0.61	0.89	0.43	6.50	13.07	-
Fordia leptobotrys	*Millettia*	*Leguminosae*	3.15	0.84	1.00	5.80	11.40	-
Barringtonia fusicarpa	*Barringtonia*	*Lecythidaceae*	2.92	1.20	7.17	7.23	14.63	22.07
Chisocheton cumingianus	*Chisocheton*	*Meliaceae*	1.79	1.20	1.84	6.87	11.47	23.37
Polyalthia simiarum	*Polyalthia*	*Annonaceae*	0.89	0.84	0.38	7.50	11.93	23.60
Mezzettiopsis creaghii	*Mezzettiopsis*	*Annonaceae*	3.81	1.15	1.64	7.00	12.87	23.88
Litsea liyuyingi	*Litsea*	*Lauraceae*	0.16	0.37	0.48	7.70	13.67	28.6
Symplocos cochinchinensis	*Symplocos*	*Symplocaceae*	1.31	0.63	0.58	6.87	-	23.85
Garcinia cowa	*Garcinia*	*Guttifera*	1.25	0.94	0.85	6.78	15.57	21.43
Picrasma chinensis	*Picrasma*	*Simaroubaceae*	1.11	0.94	1.12	7.73	12.40	29.17

Table S2. Pearson correlation matrixes among 18 functional traits of 20 tree species in an Asian tropical rainforest
Abbreviations are the same as in Table 1

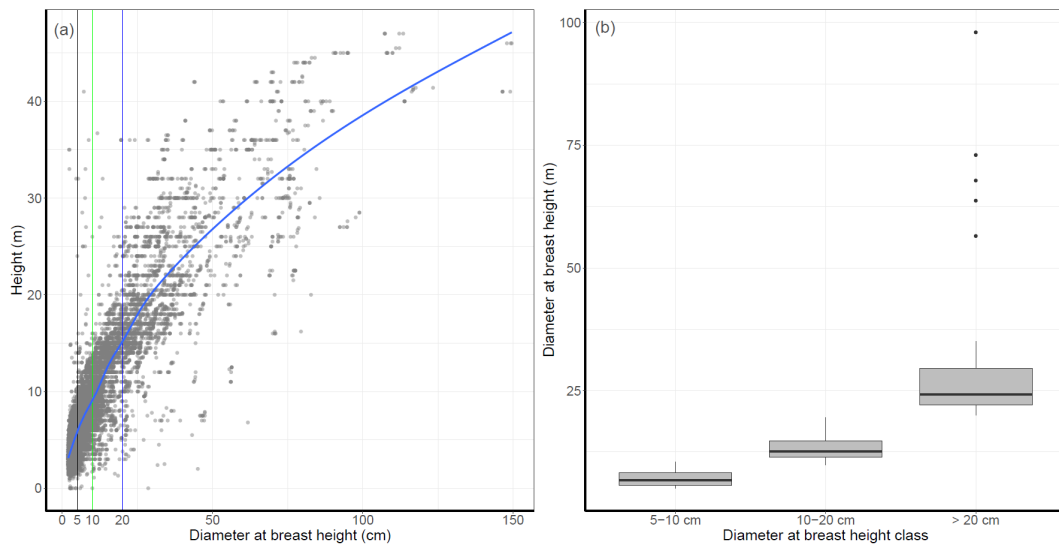|	DBH	WD	RWCs	RWCl	D_h	VD	K_{theo}	D_{vein}	SS	SD	ILM	SLA	LT	PT	SP	LET	TN	TP	TK
GR	0.24**	-0.10	0.16*	0.04	0.14	0.00	0.22*	0.24**	-0.18*	0.16	0.22**	-0.16*	-0.01	0.22**	-0.05	-0.17*	-0.04	0.01	-0.09
DBH		0.02	-0.16*	-0.02	0.08	0.06	0.23**	0.20*	-0.10	0.07	0.21**	-0.26**	0.17*	0.21**	0.15	-0.14	-0.08	0.13	-0.05
WD			-0.20**	-0.23**	-0.56***	0.48**	-0.41***	-0.16	0.27*	-0.17	-0.02	-0.19	-0.03	-0.01	-0.07	0.27***	-0.25*	-0.37**	-0.10
RWCs				0.36***	0.07	-0.03	0.04	0.28*	-0.08	0.12	-0.03	0.05	-0.34**	-0.14	-0.34**	-0.16	0.14	0.16	0.10
RWCl					0.20*	-0.11	0.15	0.34**	-0.27	0.28**	0.15	-0.14	-0.12	0.01	-0.09	-0.34**	0.02	0.15	-0.06
D_h						-0.73***	0.86***	0.23*	-0.25**	0.20*	0.08	0.12	-0.04	0.06	-0.03	-0.27**	0.27**	0.31***	-0.17*
VD							-0.39***	-0.11	0.10	-0.09	-0.06	-0.26*	0.15	0.13	0.13	0.12	-0.33***	-0.31**	0.08
K_{theo}								0.33***	-0.31**	0.27**	0.21*	-0.14	0.00	0.19*	-0.02	-0.32**	0.11	0.14	-0.34**
D_{vein}									-0.51***	0.50***	0.29*	-0.19	-0.24*	0.13	-0.35**	-0.34**	-0.05	-0.05	-0.44**
SS										-0.68***	-0.12	-0.02	0.24**	0.10	0.18	0.51***	0.22*	0.08	0.31**
SD											0.24**	-0.07	-0.42**	-0.21*	-0.41**	-0.45**	0.10	-0.01	-0.22*
ILM												-0.55***	0.17	0.14	0.16	-0.17*	0.05	-0.01	-0.20*
SLA													-0.46***	-0.42***	-0.42***	0.15	0.31***	0.33***	0.39***
LT														0.66***	0.94***	0.30***	-0.26*	-0.05	-0.09
PT															0.44***	0.19*	-0.35**	-0.17*	-0.30**
SP																0.12	-0.24	0.00	0.01
LET																	0.08	0.04	0.23*
TN																		0.68***	0.43***
TP																			0.62***

Fig. S1. The relationship between the diameter at breast height (DBH) and the tree species height within the plot in 2015 (a). The box-plot of diameter at breast (DBH) of three size classes of 20 tree species in an Asian tropical rainforest (b). The box-plot shows the median, the 25th and 75th quartile and the maximum to minimum values.
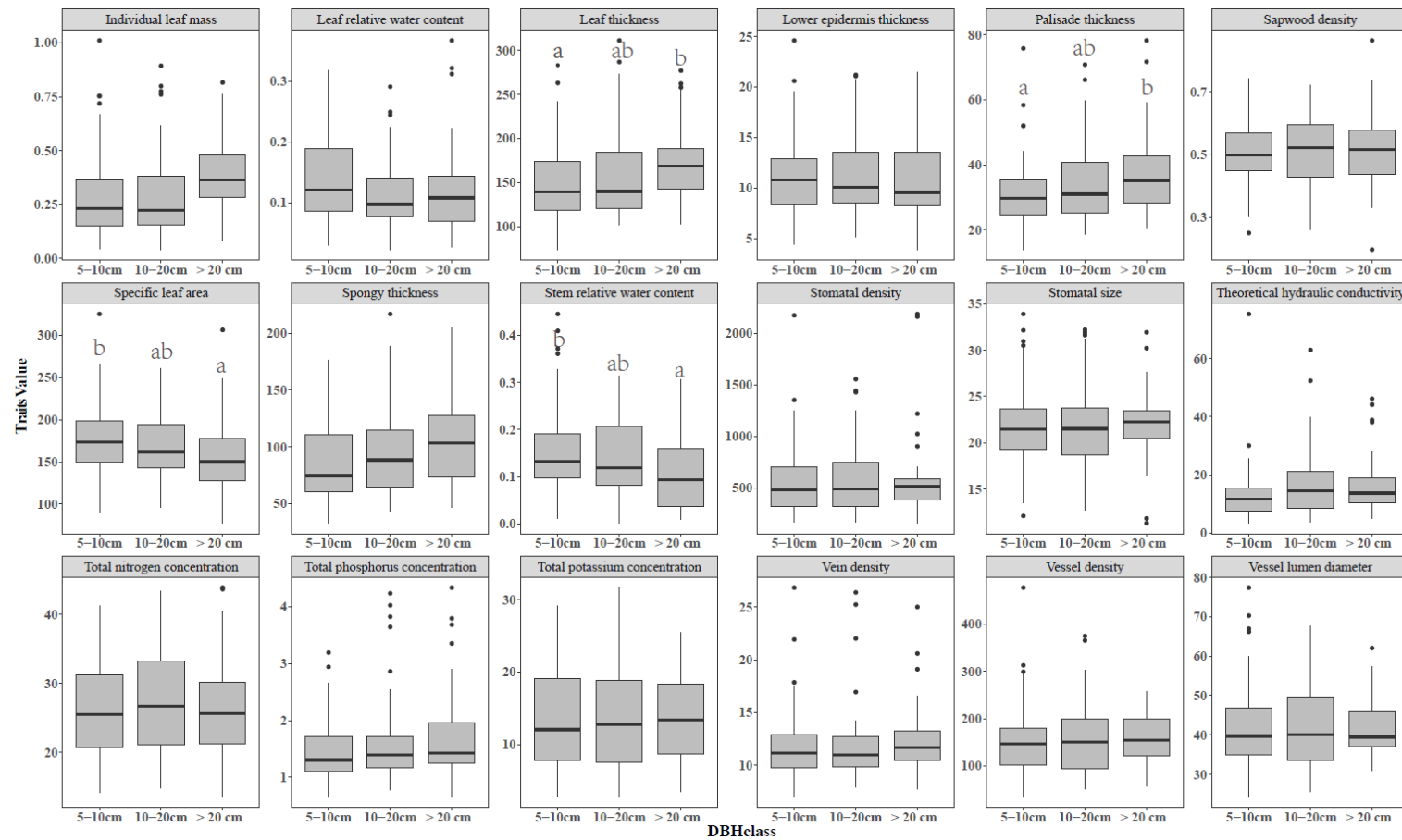
Fig. S2. The box-plot of 18 functional traits differences for three size classes (DBH 5-10 cm, 10-20 cm, > 20 cm) of 20 tree species in an Asian tropical rainforest. The box-plot shows the median, the 25th and 75th quartile and the maximum to minimum values.