

Table 2S. *Pearson's* correlation coefficients and phylogenetically independent contrast correlations coefficients between measured parameters. Correlations between species are given *upper right* of the diagonal, and correlations between phylogenetically independent contrasts (PIC) are given *lower left*. $P_{\max}$ – maximum photosynthetic rate [$\mu\text{mol m}^{-2} \text{s}^{-1}$]; $E_{\max}$ – maximum transpiration rate [$\text{mmol m}^{-2} \text{s}^{-1}$]; g_s – maximum stomatal conductance [$\text{mmol m}^{-2} \text{s}^{-1}$]; WUE – water use efficiency [$\mu\text{mol mmol}^{-1}$]; N_{area} – nitrogen content per unit leaf area [g m^{-2}]; PNUE – photosynthetic nitrogen use efficiency [$\text{mmol g}^{-1} \text{s}^{-1}$]; $\delta^{13}\text{C}$ – stable carbon isotope ratio [‰]; LMA – leaf mass per area [g m^{-2}]; SD – stomatal pore index [$\times 10^{-2}$]; $\Delta\Psi_L$ – diurnal leaf water potential [MPa]; W_d – wood density [g cm^{-3}]; D_v – vessel diameter [μm]; V_d – vessel density [No. mm^{-2}]; RGR – mean annual diameter relative growth rate [$\% \text{y}^{-1}$]. Significantly correlated traits are marked: * $P<0.05$; ** $P<0.01$; *** $P<0.001$.

	$P_{\max}$	$E_{\max}$	g_s	WUE	PNUE	N_{area}	$\delta^{13}\text{C}$	LMA	SD	GCL	SPI	$\Delta\Psi_L$	W_d	D_v	V_d	RGR
$P_{\max}$																
$E_{\max}$	0.707***		0.830***	0.351	0.410	0.473*	-0.111	0.459*	0.090	0.392	0.481*	0.283	-0.159	0.553**	-0.130	0.306
g_s	0.892***	0.797***	0.711***	-0.515*	0.155	0.344	-0.349	0.331	-0.136	0.619**	0.482*	0.629**	-0.006	0.496*	0.007	0.231
WUE	0.474**	-0.267	0.194	0.025	0.038	0.705***	-0.059	0.486*	0.097	0.479*	0.586**	0.359	-0.147	0.554**	-0.032	0.304
PNUE	0.180	-0.042	-0.054	0.380	0.261	0.067	0.172	0.010	0.239	-0.341	-0.105	-0.421*	-0.097	-0.036	-0.085	-0.027
N_{area}	0.711***	0.577**	0.819***	0.180	-0.514*	-0.571**	-0.290	0.003	0.132	0.020	-0.146	0.173	0.269	0.059	-0.188	0.329
$\delta^{13}\text{C}$	0.002	-0.226	0.053	0.179	-0.156	0.249	0.266	0.293	0.238	0.328	0.617**	0.088	0.411	0.419*	0.063	0.007
LMA	0.683***	0.536*	0.619**	0.170	-0.202	0.596**	-0.121	-0.127	-0.146	-0.050	-0.167	-0.237	-0.448*	-0.046	-0.027	-0.295
SD	-0.281	-0.454*	-0.269	0.181	-0.128	-0.063	-0.049	-0.248	0.035	0.368	0.318	0.012	-0.180	0.250	0.130	0.272
GCL	0.636**	0.676***	0.624**	-0.008	-0.098	0.543**	-0.127	0.651**	-0.606**	-0.524*	0.408	-0.019	-0.193	0.099	0.049	0.242
SPI	0.544**	0.406	0.545**	0.192	-0.245	0.638**	-0.187	0.542**	0.072	0.720***	0.517*	0.420*	0.121	0.448*	0.062	-0.086
$\Delta\Psi_L$	0.244	0.460*	0.244	-0.221	-0.064	0.208	-0.120	0.185	-0.243	0.480*	0.346	0.374	-0.105	0.659***	-0.066	0.145
W_d	-0.209	-0.134	-0.217	-0.009	0.401	-0.483*	-0.557**	-0.297	0.018	-0.080	-0.091	-0.327	-0.130	0.265	0.039	0.183
D_v	0.581**	0.517*	0.611**	0.157	-0.140	0.545**	0.003	0.437*	-0.377	0.598**	0.480*	0.179	-0.064	0.009	-0.095	-0.242
V_d	-0.225	-0.066	-0.145	-0.189	-0.122	-0.061	0.020	-0.124	0.279	-0.076	0.022	0.182	-0.138	-0.381	-0.464*	-0.097
RGR	0.249	0.213	0.267	0.023	0.258	0.069	-0.192	0.156	0.138	-0.135	-0.039	-0.055	-0.195	-0.224	-0.059	-0.090