

**Table S1.** The results of the loadings for each response variables for PCA analysis.

Response variables	PC1	PC2
LL	0.21319	0.26999
LW	0.22398	-0.14029
LT	0.2051	0.19495
LL:LW	-0.03707	0.43714
SLA	-0.24413	0.09222
LTD	0.21102	-0.09163
RD	-0.03134	0.08056
SRL	0.20588	0.16701
SRA	0.17177	-0.09162
RTD	0.19453	0.10767
Leaf C content	0.23886	-0.10239
Leaf N content	-0.22479	0.01419
Leaf P content	0.19786	0.29276
Leaf C:N	0.23311	-0.04283
Leaf C:P	0.06676	-0.40228
Leaf N:P	-0.24095	-0.07565
Root C content	-0.2481	-0.12737
Root N content	0.15121	-0.13336
Root P content	-0.18606	0.31272
Root C:N	-0.2423	-0.0689
Root C:P	-0.18681	-0.33243
Root N:P	0.18531	-0.28671
Leaf biomass	0.22754	-0.09815
Root biomass	-0.16198	0.01305
Biomass ratio of leaf:root	-0.23985	0.04697

LL, leaf length; LW, leaf width; LT, leaf thickness; LL:LW, ratio of leaf length:leaf width; SLA, specific leaf area; LTD, leaf tissue density; RD, root diameter; SRA, specific root surface area; SRL, specific root length; RTD, root tissue density.

**Table S2.** The results of One-way ANOVA for the effects of N application on PC1 and PC2.

Response variables	df	F	P
PC1	3	246.92	< 0.001
PC2	3	23.70	< 0.001