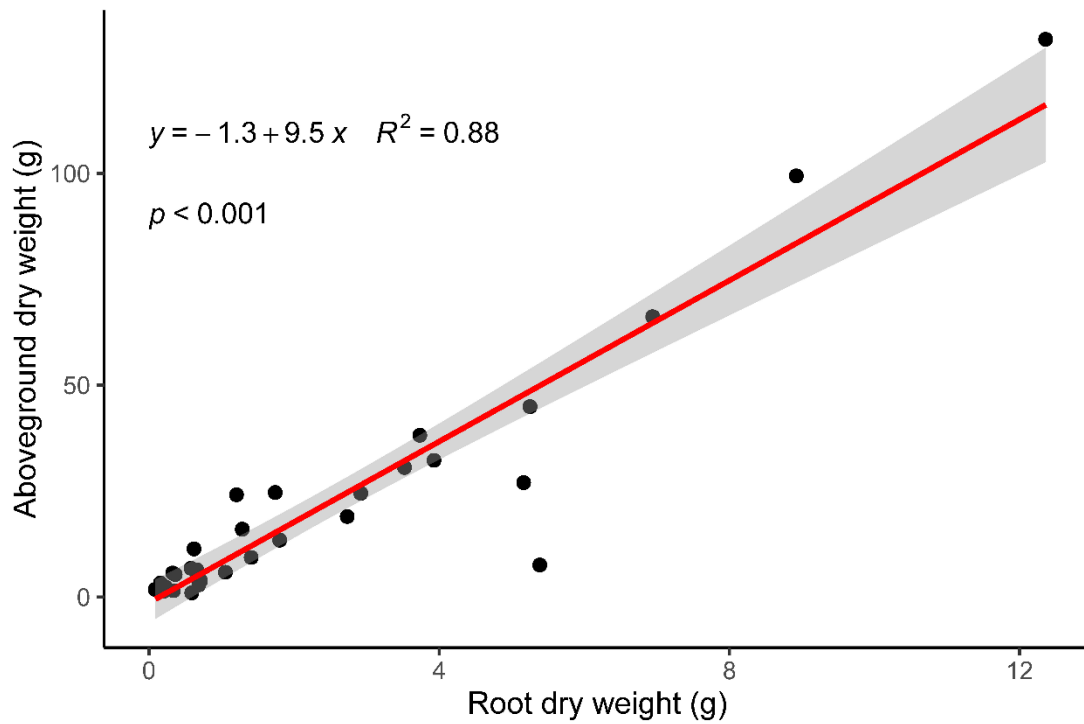


- 1 This supplementary material contains outputs from data analyses that were performed on the
2 entire dataset (n=33) prior to exclusion of small plants.



- 3
4 **Fig. S1** Relationship between the root dry weight and the aboveground dry weight with no
5 data removed (n=33). The red line is the trendline obtained using linear regression, the
6 shaded area indicates the 95% confidence interval around the regression line. The root mass
7 fraction is estimated as 0.095

8

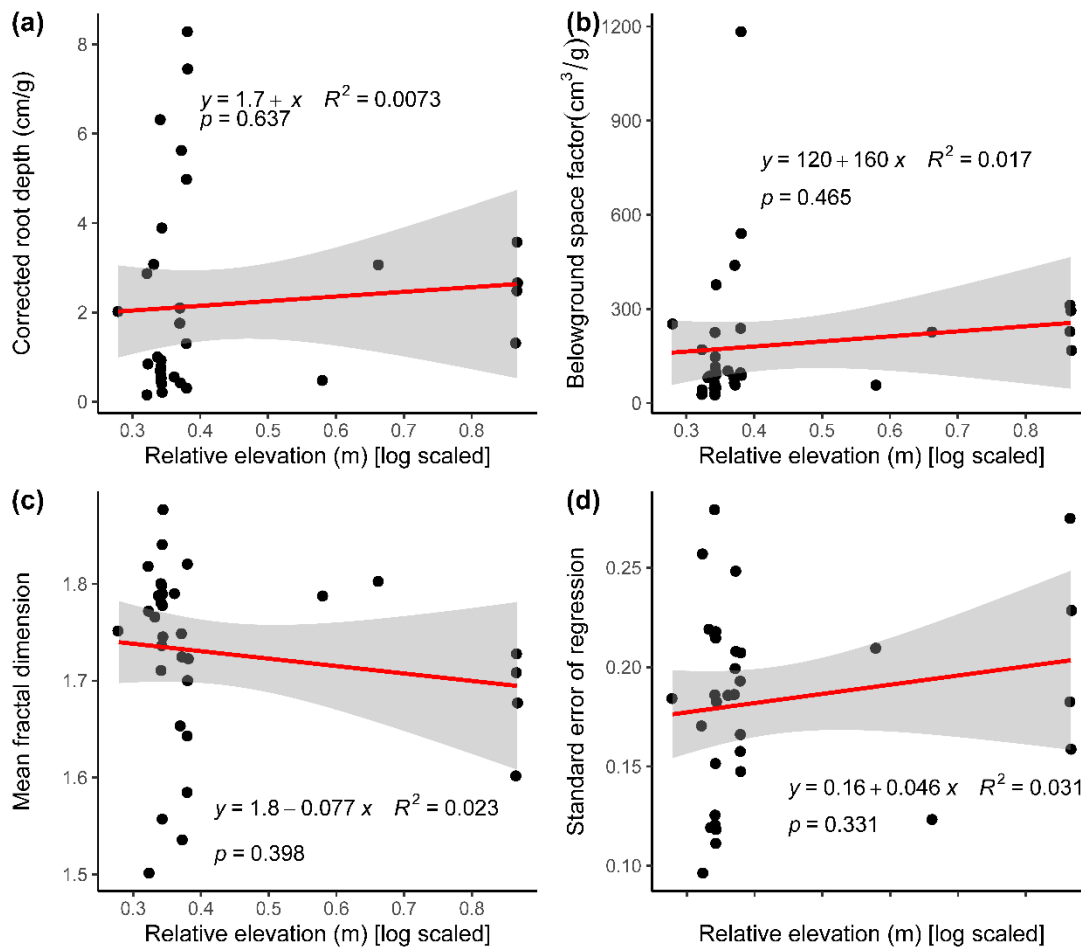


Fig. S2 Relationships between the (a) corrected root depth, (b) belowground space occupation, (c) mean fractal dimension, and (d) the standard deviation of fractal dimension, and the relative elevation above the river when no data were removed (n=33). The red lines are the trendlines obtained using linear regression. The shaded areas indicate the 95% confidence interval around the regression lines

Table S1 The outputs of analyzing the relationship between root characteristics and several predictors by using a linear regression model

Individual root variable models						
Model attributes		Root mass fraction	Root depth	Belowground space	Mean fractal dimension	Standard error of regression
Intercept	Estimated value	0.1344	11.2444	519.3000	1.6998	0.1852
	p-value	<0.0001	<0.0001	0.1410	<0.0001	<0.0001
Relative elevation (log scale)	Estimated value	-0.0054	1.2060	177.0040	-0.0038	0.0042
	p-value	0.5260	0.0032	0.2260	0.6516	0.4030
Total biomass	Estimated value	-0.0005	0.1200	64.4920	0.0014	0.0003
	p-value	0.3160	<0.0001	<0.0001	0.0045	0.3310

Multiple R-squared	0.0401	0.5648	0.6953	0.2602	0.0647
Adjusted R-squared	-0.0239	0.5358	0.6750	0.2108	0.0024
Degrees of freedom	30	30	30	30	30
p-value	0.5409	<0.0001	<0.0001	0.01089	0.3665

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