

Intra-organismal variation in the structure of plant vascular transport tissues in poplar trees

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Results S1. Linear mixed effects model results for the relationship between xylem and phloem conduit diameter and organ and organ diameter.

Model 1: Xylem Diameter ~ Organ (Fixed Effect) + Organ Diameter (Covariate) + Organ * Organ Diameter + Tree (Random Effect)

Table S1. Random effects of Model 1.

Random Effects	Variance	Standard Deviation
Tree	0.00	0.000
Residual	76.37	8.739

Table S2. Fixed effects of Model 1.

Fixed Effects	Coefficient	Standard Error	t value
Intercept	130.4	13.1	9.9
Organ(Shoot)	-61.9	18.2	-3.4
Organ Diameter	23.5	6.3	3.7
Organ(Shoot)*Organ Diameter	-6.2	9.5	-0.7

Table S3. Significance of the fixed effects of Model 1 established by Type II Wald Chisquare test.

Fixed effects	Chisquare	Degrees of freedom	Probability(>Chisquare)
Organ	172.6	1	<0.001
Organ Diameter	19.1	1	<0.001
Organ*Organ Diameter	0.4	1	0.5131

Model 2: Phloem Diameter ~ Organ (Fixed Effect) + Organ Diameter (Covariate) + Organ * Organ Diameter + Tree (Random Effect)

Table S4. Random effects of Model 2.

Random Effects	Variance	Standard Deviation
Tree	0.74	0.86
Residual	10.42	3.23

Table S5. Fixed effects of Model 2.

Fixed Effects	Coefficient	Standard Error	t value
Intercept	58.6	4.9	12.0
Organ(Shoot)	-23.6	6.8	-3.5
Organ Diameter	13.6	2.3	5.8
Organ(Shoot)*Organ Diameter	-6.4	3.5	-1.8

Table S6. Significance of the fixed effects of Model 2 established by Type II Wald Chisquare test.

Fixed effects	Chisquare	Degrees of freedom	Probability(>Chisquare)
Organ	69.2	1	<0.001
Organ Diameter	38.0	1	<0.001
Organ*Organ Diameter	3.2	1	0.0731