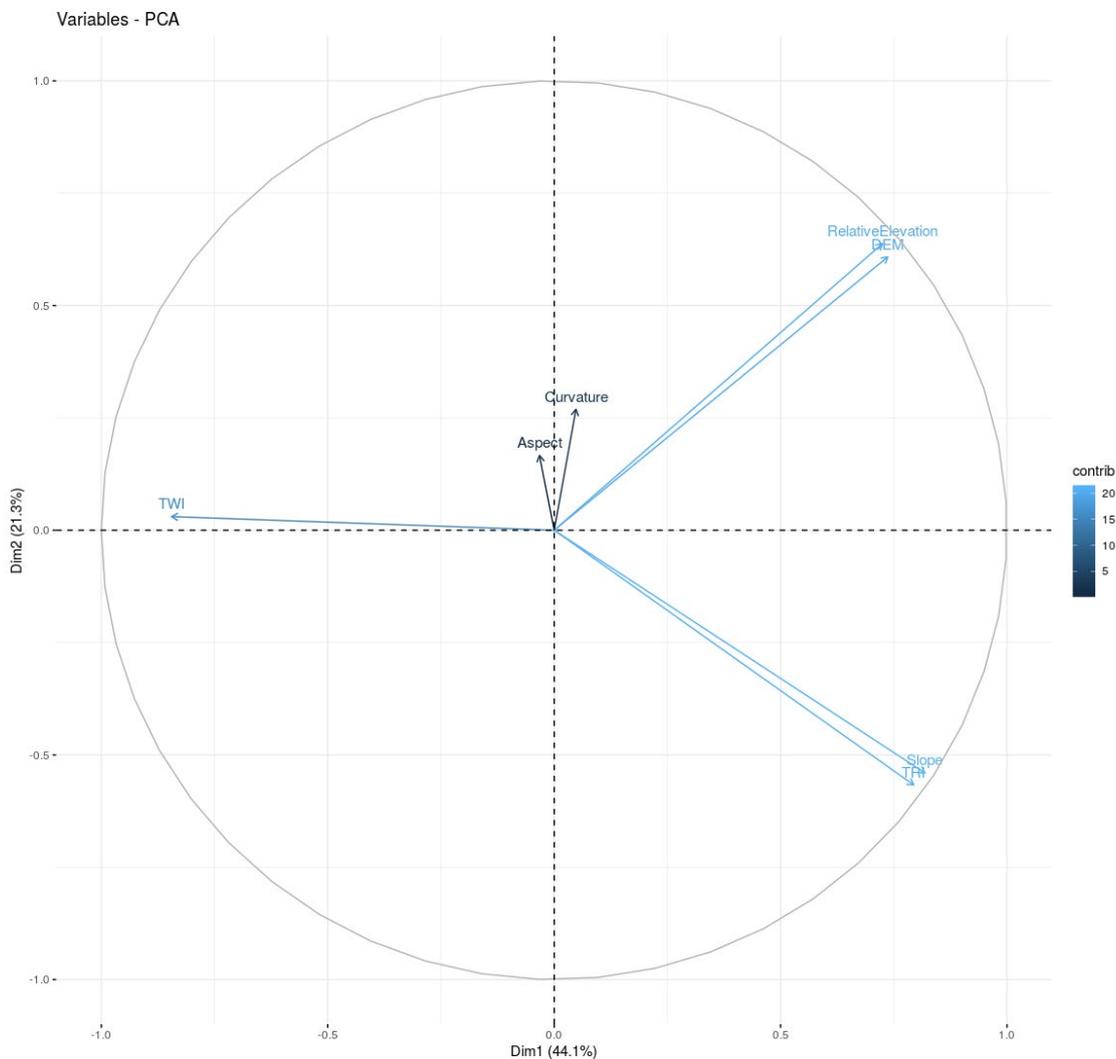


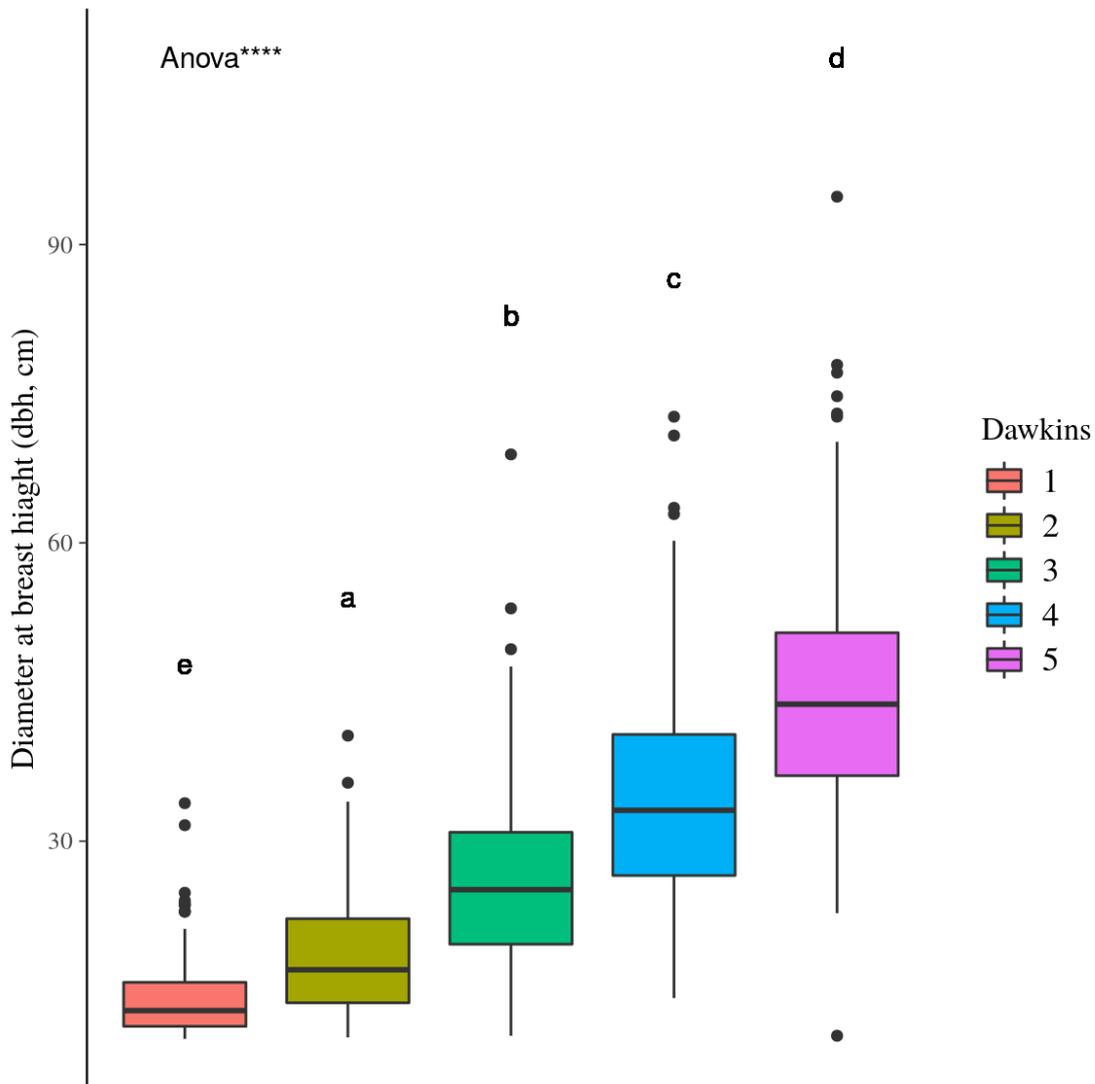
Schmitt, S., Hérault, B., Ducouret, E., Baranger, A., Tysklind, N., Heuertz, M., Marcon, É., Cazal, S. O. and Derroire, G. 2020. Topography consistently drives intra- and inter-specific leaf trait variation within tree species complexes in a Neotropical forest. – Oikos doi: 10.1111/oik.07488

Appendix 1



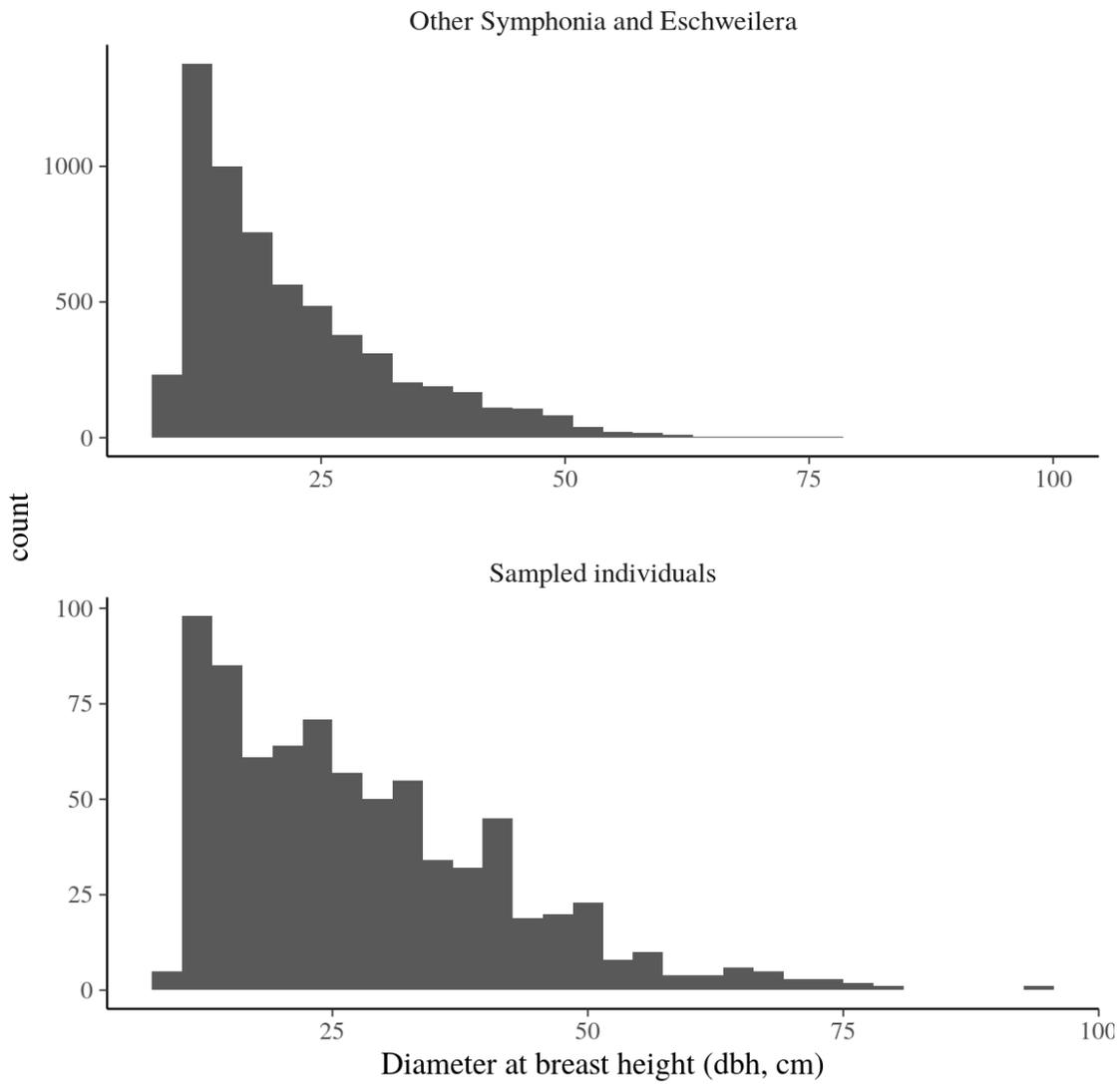
Principal component analysis (PCA) of abiotic topographic variables. All variables, slope, curvature, aspect, topographic ruggedness index (TRI), and topographic wetness index (TWI) are derived from the digital elevation model (DEM) obtained through LiDAR campaign in 2015.

Appendix 2



Diameter at breast height (DBH) and Dawkins index correlation. Box colors indicate the Dawkins index. DBH and Dawkins index correlation has been investigated by Anova. **** indicates a p – value < 0.0001 . Letters indicate post hoc groups investigated by Tukey honest significant differences.

Appendix 3



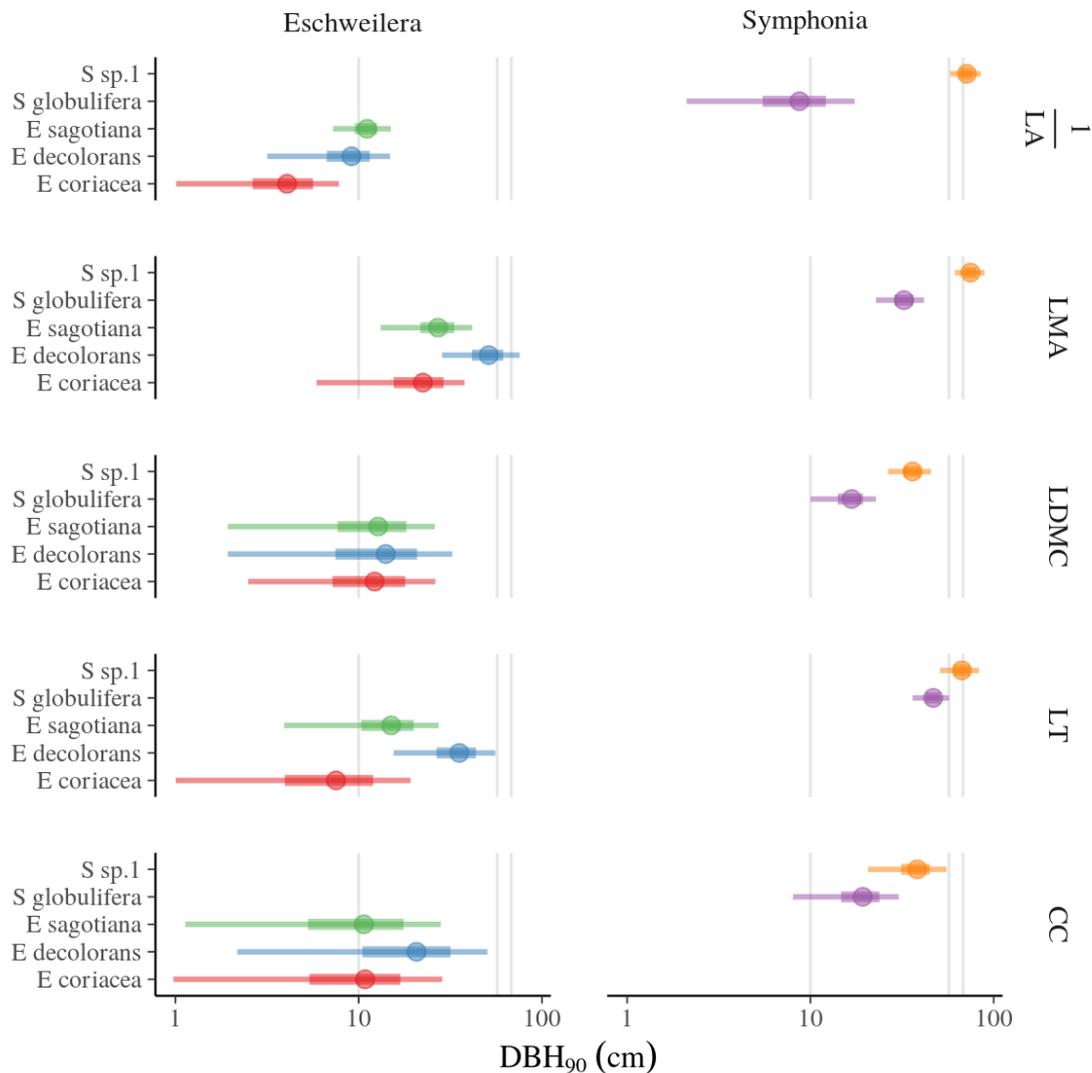
Diameter at breast height (DBH) distribution between sampled individuals and other *Symphonia* and *Eschweilera* individuals of Paracou.

Appendix 4

Log-likelihood for diameter model depending on model form (linear versus Michaelis–Menten).

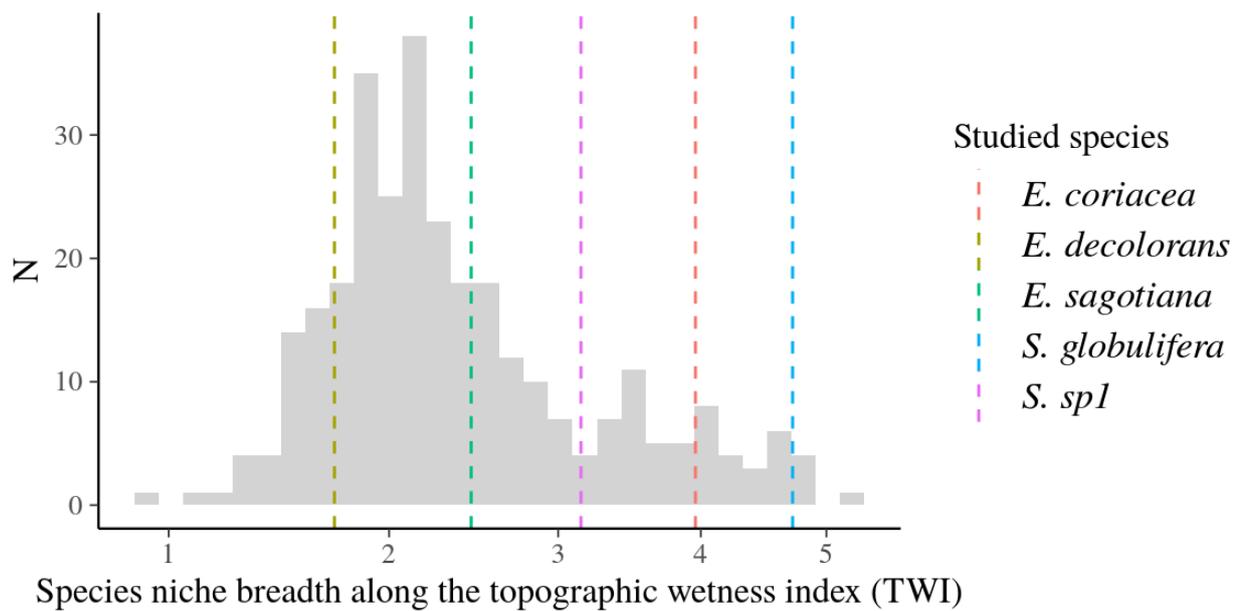
Genus	Trait	Linear	Michaelis Menten	Difference
<i>Eschweilera</i>	<i>LMA</i>	-85.212	-78.300	-6.911
<i>Eschweilera</i>	<i>LDMC</i>	-42.237	-44.454	2.217
<i>Eschweilera</i>	<i>LT</i>	-14.265	-8.660	-5.605
<i>Eschweilera</i>	$\frac{1}{LA}$	411.503	414.119	-2.615
<i>Eschweilera</i>	<i>CC</i>	-190.383	-192.942	2.559
<i>Symphonia</i>	<i>LMA</i>	-103.963	-97.755	-6.208
<i>Symphonia</i>	<i>LDMC</i>	48.134	56.714	-8.580
<i>Symphonia</i>	<i>LT</i>	-159.831	-159.919	0.088
<i>Symphonia</i>	$\frac{1}{LA}$	-91.641	-86.634	-5.006
<i>Symphonia</i>	<i>CC</i>	-185.400	-176.199	-9.200

Appendix 5



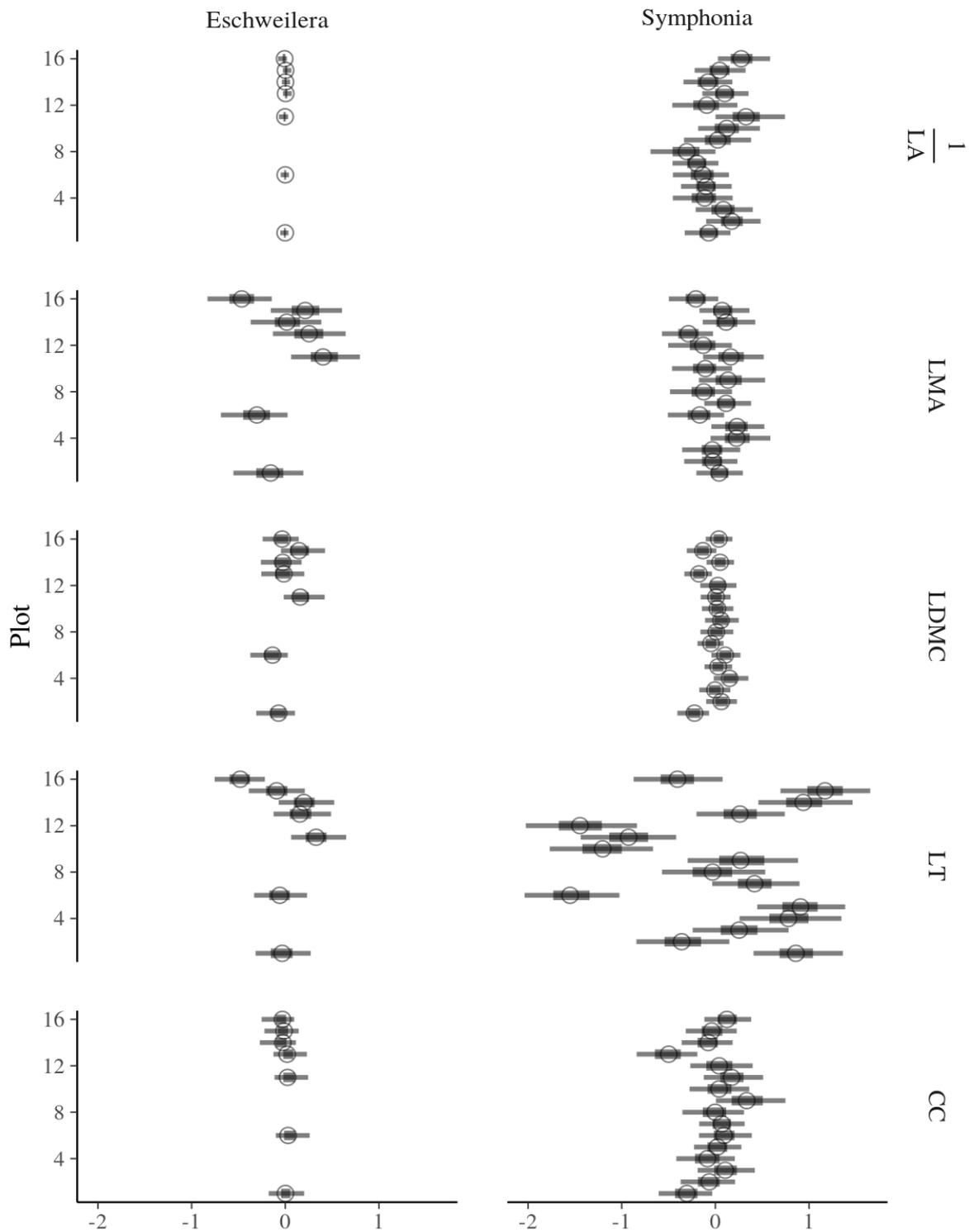
Effect of tree diameter on leaf functional trait variation. The posterior distribution of species diameter at breast height for which a given trait reaches 90% of its maximum value (DBH₉₀) was estimated for every trait for all species in both complexes using Bayesian inference. Circles represent the mean estimate, thick line the 50% confidence interval and thin line the 95% confidence interval, and color the corresponding species. Vertical lines indicate from left to right: 1) tree recruitment diameter and 2) and 3) 95th percentile of diameter for *Eschweilera* and *Symphonia*, respectively.

Appendix 6



Species niche breadth along the topographic wetness index (TWI) for all species from Paracou. Niche breadth has been calculated as the difference between the 95th quantile and the 5th quantile of TWI for all species from Paracou with at least 20 individuals. Dashed vertical lines represent niche breadth value for species from this study indicated by line color. *Eschweilera coriacea* and the two *Symphonia* species have bigger niche breadth than most Paracou species but *E. sagotiana* and *E. coriacea* have niche breadth similar to the majority of Paracou species.

Appendix 7



Random effects of plots on leaf functional trait variation. The posterior distribution of plot effect was estimated for every trait for all plots in both complexes using Bayesian inference. Circles represent the mean estimate, thick line the 50% confidence interval and thin line the 95% confidence interval, and color the corresponding species.