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Supplementary Material

The hydraulic architecture of *Eucalyptus* trees growing across a gradient of depth-to-groundwater

Sepideh Zolfaghar^{A,B,D}, *Randol Villalobos-Vega*^{A,B}, *Melanie Zeppel*^C and *Derek Eamus*^{A,B}

^AUniversity of Technology Sydney, PO Box 123, Broadway, Sydney, NSW 2007, Australia.

^BNational Centre for Groundwater Research and Training, University of Technology Sydney, PO Box 123, Broadway, Sydney, NSW 2007, Australia.

^CDepartment of Biological Sciences, Macquarie University, Balacclava Road, North Ryde, NSW 2109, Australia.

^DCorresponding author. Email: sepideh.zolfaghar@gmail.com

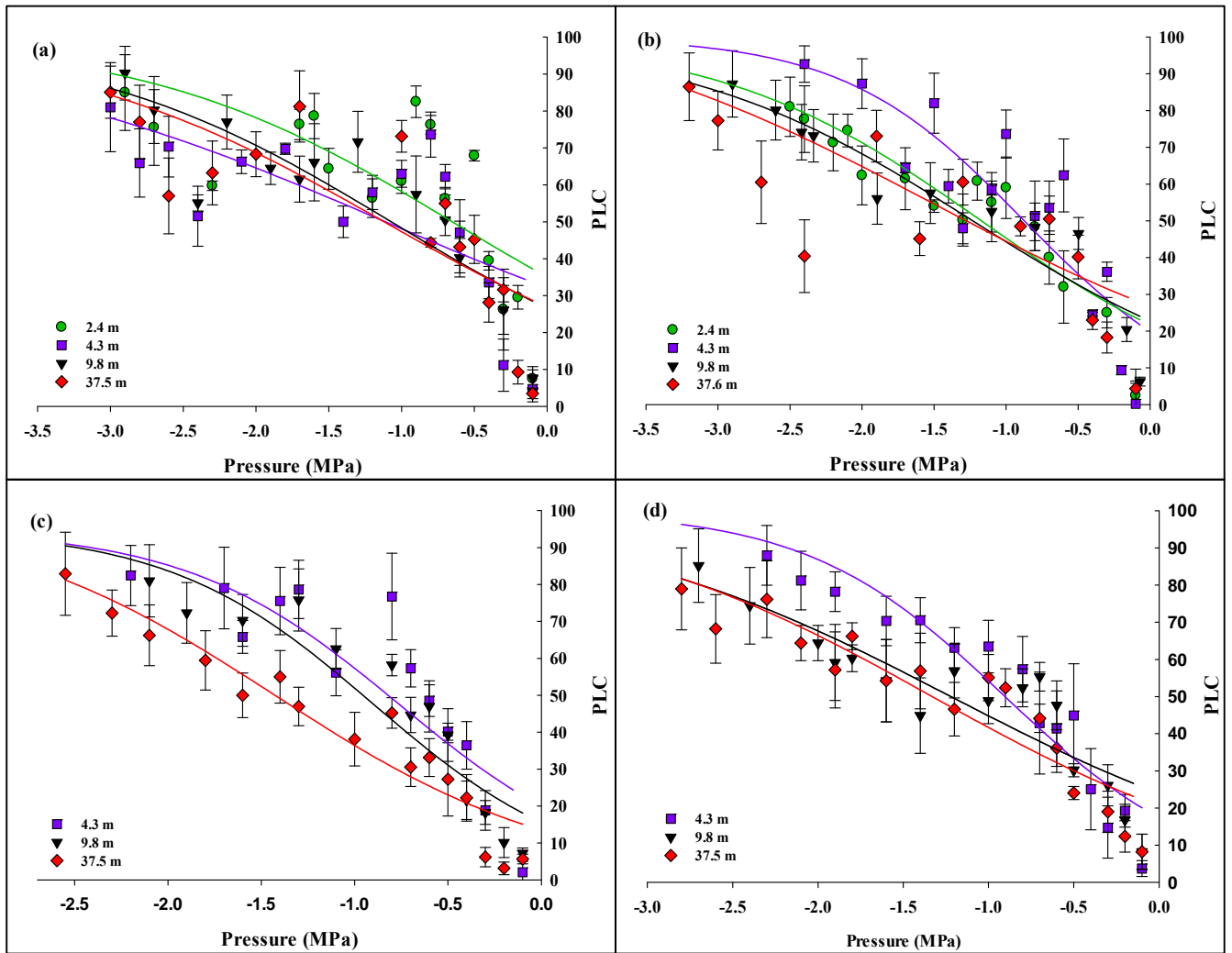


Fig. S1. Summer measurement of xylem vulnerability curve of four species in four sites: (a) *E. piperita*, (b) *E. globoidea*, (c) *E. sieberi* and (d) *E. sclerophylla*.

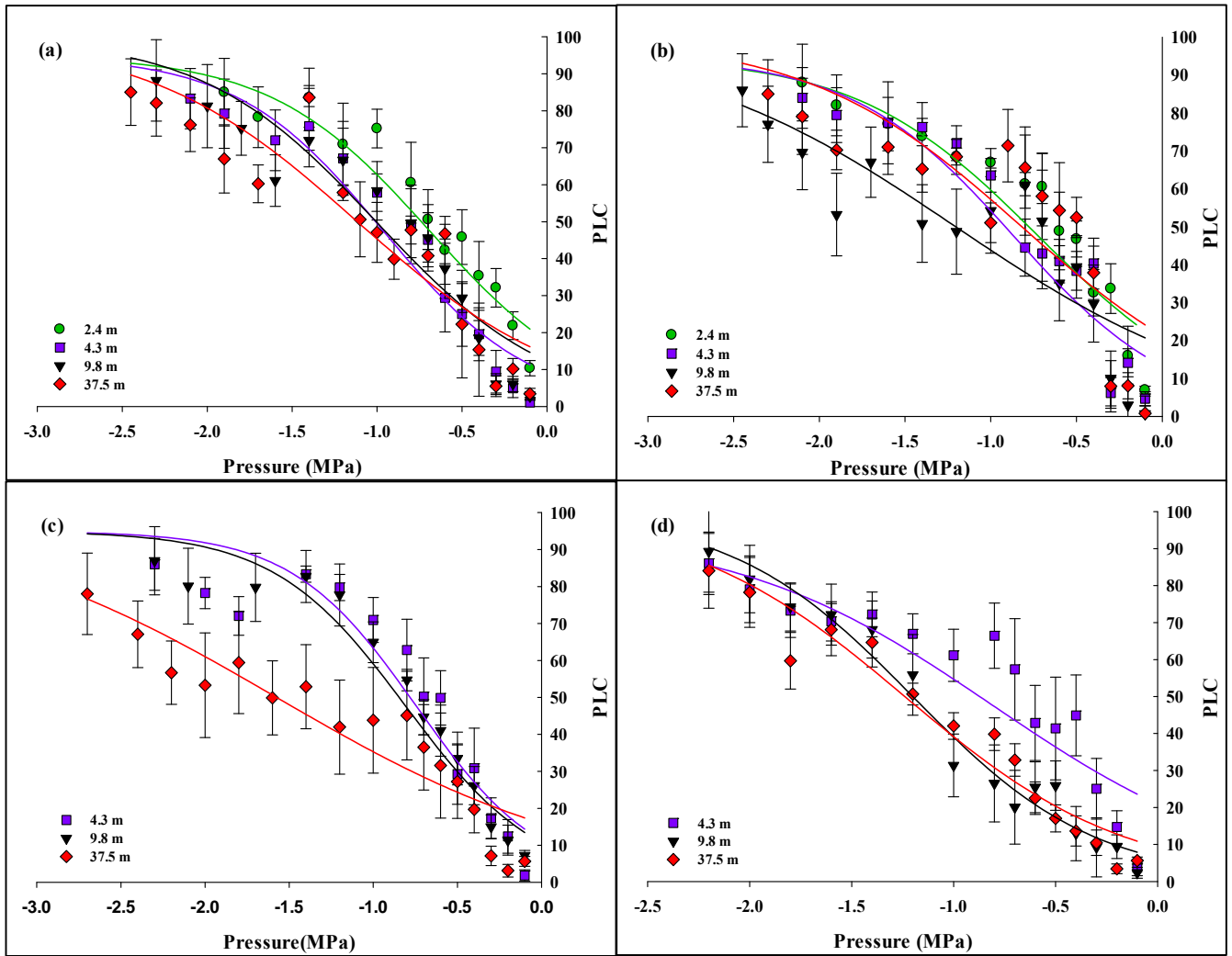


Fig. S2. Winter measurement of xylem vulnerability curve of four species in four sites: (a) *E. piperita*, (b) *E. globoidea*, (c) *E. sieberi* and (d) *E. sclerophylla*.

Table S1. Sapwood density (g cm^{-3}) of species across sites with different depth-to-groundwater

Values presented as means followed by standard error. NA indicate that species was not measured at that site. The * symbol indicates a significant difference among sites for each species

DGW Species	2.4 m	4.3 m	9.8 m	13.0 m	16.3 m	37.5 m
<i>E. piperita</i>	0.54 ± 0.02	0.53 ± 0.01	0.52 ± 0.02	NA	NA	0.55 ± 0.01
<i>E. globoidea</i>	0.55 ± 0.02	0.54 ± 0.01	0.54 ± 0.01	NA	NA	0.56 ± 0.01
<i>E. sieberi</i>	NA	0.54 ± 0.03	0.58 ± 0.01*	NA	NA	0.53 ± 0.01
<i>E. sclerophylla</i>	NA	0.49 ± 0.01	0.52 ± 0.01	0.47 ± 0.02	0.45 ± 0.01	0.49 ± 0.02
<i>E. radiata</i>	0.53 ± 0.01	NA	NA	NA	NA	NA

Table S2. Values for air entry pressure (P_e), pressure where PLC was 50% (P_{50}) and minimum diurnal leaf water potential (Ψ_{min}) for stem for each species across sites in summer and winter

NA indicate that species was not measured at that site

Species	DGW	Season	P_e	P_{50}	Ψ_{min}	
<i>E. piperita</i>	2.4 m	Summer	-0.35	-0.66	-1.63	
		Winter	-0.45	-0.69	-1.37	
	4.3 m	Summer	-0.36	-1.11	-1.44	
		Winter	-0.74	-0.963	-1.55	
	9.8 m	Summer	-0.54	-1.07	NA	
		Winter	-0.74	-1.00	-1.23	
	37.5 m	Summer	-0.58	-1.12	-1.72	
		Winter	-0.80	-1.11	-1.38	
	<i>E. globoidea</i>	2.4 m	Summer	-0.55	-0.87	-1.56
			Winter	-0.50	-0.77	-1.42
4.3 m		Summer	-0.71	-1.17	-2.03	
		Winter	-0.62	-0.86	-1.68	
9.8 m		Summer	-0.72	-1.23	NA	
		Winter	-0.78	-1.20	-1.48	
37.5 m		Summer	-0.85	-1.52	-1.79	
		Winter	-0.69	-0.82	-1.04	
<i>E. sieberi</i>		4.3 m	Summer	-0.47	-0.76	-1.64
			Winter	-0.55	-0.74	-1.68
	9.8 m	Summer	-0.61	-0.89	NA	
		Winter	-0.63	-0.84	-1.45	
	37.5 m	Summer	-1.03	-1.42	-1.69	
		Winter	-1.09	-1.57	-1.47	
<i>E. sclerophylla</i>	4.3 m	Summer	-0.61	-0.90	-1.53	

Species	DGW	Season	P_e	P₅₀	Ψ_{min}
		Winter	-0.48	-0.80	-1.38
	9.8 m	Summer	-0.68	-1.22	NA
		Winter	-0.97	-1.20	-1.36
	37.5 m	Summer	-0.84	-1.33	-1.78
		Winter	-0.97	-1.24	-1.55