

Table 1S. Mean values $\pm$ standard error for five JIP-test parameters in *A. sparsifolia* under N1, G1, N2, and G2 before and after girdling. ABS/RC – photon absorbance rate per reaction centre (RC); TR_o/RC – exciton trapping rate per RC; DI_o/RC – exciton dissipation rate per RC; ET_o/RC – electron transport rate per RC; RC/CS – density of PSII reaction center per excited cross-section. N1 – nongirdling with one branch left; G1 – girdling with one branch left; N2 – nongirdling with two branches left; G2 – girdling with two branches left. The data represent means of five biological replicates $\pm$ SD. *Different letters* indicate significant effects ($p < 0.05$).

Time	Parameter	Treatment			
		N1	G1	N2	G2
Before girdling	ABS/RC	1.95 $\pm$ 0.04 ^a	2.05 $\pm$ 0.06 ^a	1.97 $\pm$ 0.06 ^a	2.03 $\pm$ 0.10 ^a
	TR _o /RC	1.65 $\pm$ 0.04 ^a	1.75 $\pm$ 0.07 ^a	1.67 $\pm$ 0.06 ^a	1.72 $\pm$ 0.09 ^a
	DI _o /RC	0.30 $\pm$ 0.01 ^a	0.30 $\pm$ 0.01 ^a	0.30 $\pm$ 0.01 ^a	0.31 $\pm$ 0.01 ^a
	ET _o /RC	1.05 $\pm$ 0.08 ^a	1.06 $\pm$ 0.14 ^a	0.98 $\pm$ 0.03 ^a	1.00 $\pm$ 0.04 ^a
	RC/CS	920.30 $\pm$ 45.61 ^a	906.42 $\pm$ 28.32 ^a	938.52 $\pm$ 26.72 ^a	903.42 $\pm$ 24.64 ^a
After girdling	ABS/RC	2.16 $\pm$ 0.07 ^a	18.74 $\pm$ 0.64 ^b	2.51 $\pm$ 0.05 ^c	16.06 $\pm$ 0.57 ^d
	TR _o /RC	1.40 $\pm$ 0.06 ^a	0.73 $\pm$ 0.02 ^b	1.34 $\pm$ 0.03 ^a	0.81 $\pm$ 0.03 ^c
	DI _o /RC	0.75 $\pm$ 0.03 ^a	18.01 $\pm$ 0.64 ^b	1.17 $\pm$ 0.03 ^c	15.25 $\pm$ 0.59 ^d
	ET _o /RC	0.92 $\pm$ 0.04 ^a	0.64 $\pm$ 0.03 ^b	0.89 $\pm$ 0.02 ^a	0.71 $\pm$ 0.01 ^c
	RC/CS	860.20 $\pm$ 860.20 ^a	60.75 $\pm$ 3.31 ^b	768.92 $\pm$ 18.49 ^c	103.64 $\pm$ 5.45 ^d