

Table 1S. Mean $\pm$ SE SPAD readings, chlorophyll *a* (Chl *a*), chlorophyll *b* (Chl *b*), total chlorophyll (Chl_{tot}), and carotenoid (Car) concentrations, the ratio of total chlorophyll (Chl_{tot}) to carotenoids (Car), and relative anthocyanin concentrations (*C_{Ant}*) through time for *Acer mono* (*Am*), *A. ginnala* (*Ag*), *Quercus mongolica* (*Qm*), and *Cornus alba* (*Ca*) from day of year (DOY) 234 to 284. Different letters in columns indicate significant differences among species at $P \leq 0.05$ using *Tamhane* and *Duncan's* multiple range test.

Items	DOY	<i>Am</i>	<i>Ag</i>	<i>Qm</i>	<i>Ca</i>
SPAD	234	42.9 $\pm$ 1.6 ^a	40.8 $\pm$ 1.2 ^a	37.9 $\pm$ 1.1 ^a	42.9 $\pm$ 2.2 ^a
	245	44.5 $\pm$ 0.5 ^a	38.4 $\pm$ 1.1 ^b	38.7 $\pm$ 1.3 ^b	43.8 $\pm$ 1.2 ^{ab}
	256	38.9 $\pm$ 0.6 ^a	37.3 $\pm$ 1.3 ^a	35.4 $\pm$ 1.5 ^a	37.3 $\pm$ 2.1 ^a
	264	37.1 $\pm$ 1.9 ^{ab}	40.4 $\pm$ 3.2 ^a	34.6 $\pm$ 1.1 ^b	38.5 $\pm$ 1.4 ^{ab}
	270	36.5 $\pm$ 0.8 ^a	32.6 $\pm$ 2.7 ^a	32.8 $\pm$ 2.0 ^a	31.5 $\pm$ 2.0 ^a
	274	32.9 $\pm$ 1.6 ^a	37.6 $\pm$ 1.4 ^a	23.0 $\pm$ 4.3 ^b	26.5 $\pm$ 1.9 ^b
	278	25.3 $\pm$ 1.8 ^b	22.2 $\pm$ 1.7 ^b	32.0 $\pm$ 2.7 ^a	35.9 $\pm$ 1.4 ^a
	282	4.2 $\pm$ 0.5 ^b	6.7 $\pm$ 1.3 ^b	16.9 $\pm$ 1.8 ^a	17.3 $\pm$ 2.2 ^a
	284	2.0 $\pm$ 0.6 ^b	4.9 $\pm$ 1.8 ^b	4.6 $\pm$ 1.8 ^b	12.4 $\pm$ 3.1 ^a
Chl <i>a</i> [mg g ⁻¹]	234	3.2 $\pm$ 0.2 ^a	2.7 $\pm$ 0.2 ^b	2.6 $\pm$ 0.2 ^b	1.7 $\pm$ 0.1 ^c
	245	3.4 $\pm$ 0.2 ^a	2.7 $\pm$ 0.1 ^b	2.6 $\pm$ 0.1 ^b	1.6 $\pm$ 0.2 ^c
	256	2.6 $\pm$ 0.1 ^a	2.4 $\pm$ 0.1 ^a	2.5 $\pm$ 0.2 ^a	1.4 $\pm$ 0.2 ^b
	264	1.9 $\pm$ 0.2 ^a	2.4 $\pm$ 0.2 ^a	2.1 $\pm$ 0.1 ^a	2.2 $\pm$ 0.1 ^a
	270	2.1 $\pm$ 0.2 ^a	1.5 $\pm$ 0.2 ^b	1.8 $\pm$ 0.1 ^{ab}	1.8 $\pm$ 0.2 ^{ab}
	274	1.6 $\pm$ 0.2 ^{abc}	1.8 $\pm$ 0.1 ^a	1.3 $\pm$ 0.2 ^{bc}	1.2 $\pm$ 0.3 ^c
	278	1.2 $\pm$ 0.1 ^b	1.0 $\pm$ 0.1 ^b	1.7 $\pm$ 0.1 ^a	1.8 $\pm$ 0.2 ^a
	282	0.1 $\pm$ 0.0 ^b	0.3 $\pm$ 0.1 ^b	0.8 $\pm$ 0.1 ^a	0.8 $\pm$ 0.1 ^a
	284	0.1 $\pm$ 0.0 ^a	0.3 $\pm$ 0.1 ^a	0.4 $\pm$ 0.1 ^a	0.4 $\pm$ 0.1 ^a
Chl <i>b</i> [mg g ⁻¹]	234	1.2 $\pm$ 0.1 ^a	1.1 $\pm$ 0.1 ^a	1.2 $\pm$ 0.1 ^a	0.7 $\pm$ 0.1 ^b
	245	1.2 $\pm$ 0.1 ^b	1.1 $\pm$ 0.0 ^b	1.5 $\pm$ 0.1 ^a	0.6 $\pm$ 0.2 ^c
	256	0.9 $\pm$ 0.0 ^b	1.0 $\pm$ 0.1 ^b	1.4 $\pm$ 0.1 ^a	0.5 $\pm$ 0.1 ^c
	264	0.6 $\pm$ 0.1 ^b	0.8 $\pm$ 0.1 ^a	0.9 $\pm$ 0.0 ^a	0.9 $\pm$ 0.1 ^a
	270	0.6 $\pm$ 0.1 ^{bc}	0.4 $\pm$ 0.1 ^c	0.8 $\pm$ 0.0 ^a	0.7 $\pm$ 0.1 ^{ab}
	274	0.4 $\pm$ 0.1 ^c	0.6 $\pm$ 0.0 ^{bc}	0.9 $\pm$ 0.1 ^a	0.6 $\pm$ 0.1 ^b
	278	0.4 $\pm$ 0.0 ^b	0.5 $\pm$ 0.1 ^b	1.0 $\pm$ 0.0 ^a	1.0 $\pm$ 0.1 ^a
	282	0.0 $\pm$ 0.0 ^c	0.3 $\pm$ 0.0 ^b	0.8 $\pm$ 0.1 ^a	0.6 $\pm$ 0.1 ^a
	284	0.1 $\pm$ 0.0 ^c	0.3 $\pm$ 0.0 ^{bc}	0.5 $\pm$ 0.1 ^a	0.4 $\pm$ 0.1 ^{ab}
Chl _{tot} [mg g ⁻¹]	234	4.4 $\pm$ 0.3 ^a	3.7 $\pm$ 0.2 ^b	3.8 $\pm$ 0.2 ^{ab}	2.4 $\pm$ 0.2 ^c
	245	4.6 $\pm$ 0.2 ^a	3.8 $\pm$ 0.1 ^b	4.1 $\pm$ 0.2 ^{ab}	2.2 $\pm$ 0.4 ^c
	256	3.4 $\pm$ 0.1 ^a	3.3 $\pm$ 0.2 ^a	4.0 $\pm$ 0.2 ^a	1.8 $\pm$ 0.2 ^b
	264	2.5 $\pm$ 0.3 ^b	3.2 $\pm$ 0.2 ^a	2.9 $\pm$ 0.1 ^{ab}	3.1 $\pm$ 0.2 ^{ab}
	270	2.7 $\pm$ 0.3 ^a	1.9 $\pm$ 0.3 ^b	2.6 $\pm$ 0.2 ^a	2.5 $\pm$ 0.3 ^{ab}
	274	2.1 $\pm$ 0.3 ^a	2.4 $\pm$ 0.1 ^a	2.2 $\pm$ 0.3 ^a	1.9 $\pm$ 0.4 ^a
	278	1.6 $\pm$ 0.2 ^b	1.6 $\pm$ 0.1 ^b	2.7 $\pm$ 0.1 ^a	2.7 $\pm$ 0.3 ^a
	282	0.2 $\pm$ 0.0 ^b	0.6 $\pm$ 0.1 ^b	1.6 $\pm$ 0.2 ^a	1.4 $\pm$ 0.2 ^a
	284	0.1 $\pm$ 0.0 ^b	0.5 $\pm$ 0.1 ^{ab}	0.9 $\pm$ 0.1 ^a	0.8 $\pm$ 0.1 ^a
Car [mg g ⁻¹]	234	0.7 $\pm$ 0.0 ^a	0.6 $\pm$ 0.0 ^a	0.6 $\pm$ 0.0 ^a	0.4 $\pm$ 0.0 ^b
	245	0.7 $\pm$ 0.0 ^a	0.6 $\pm$ 0.0 ^{ab}	0.5 $\pm$ 0.0 ^{bc}	0.4 $\pm$ 0.0 ^c
	256	0.6 $\pm$ 0.0 ^a	0.6 $\pm$ 0.0 ^a	0.5 $\pm$ 0.0 ^a	0.4 $\pm$ 0.0 ^b
	264	0.5 $\pm$ 0.0 ^a	0.6 $\pm$ 0.0 ^a	0.5 $\pm$ 0.0 ^a	0.5 $\pm$ 0.0 ^a
	270	0.6 $\pm$ 0.0 ^a	0.4 $\pm$ 0.0 ^b	0.5 $\pm$ 0.0 ^{ab}	0.5 $\pm$ 0.0 ^{ab}
	274	0.6 $\pm$ 0.0 ^a	0.5 $\pm$ 0.0 ^a	0.3 $\pm$ 0.1 ^b	0.4 $\pm$ 0.1 ^b
	278	0.5 $\pm$ 0.0 ^a	0.4 $\pm$ 0.0 ^a	0.5 $\pm$ 0.0 ^a	0.5 $\pm$ 0.0 ^a
	282	0.5 $\pm$ 0.0 ^a	0.4 $\pm$ 0.0 ^b	0.4 $\pm$ 0.0 ^b	0.3 $\pm$ 0.0 ^b
	284	0.6 $\pm$ 0.0 ^a	0.3 $\pm$ 0.0 ^b	0.4 $\pm$ 0.0 ^b	0.3 $\pm$ 0.0 ^b

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Items	DOY	Am	Ag	Qm	Ca
Chl _{tot} :Car	234	6.5 ± 0.2 ^a	6.2 ± 0.1 ^a	6.8 ± 0.1 ^a	5.6 ± 0.3 ^b
	245	6.7 ± 0.2 ^b	6.3 ± 0.1 ^b	7.6 ± 0.2 ^a	4.7 ± 0.5 ^c
	256	5.7 ± 0.2 ^b	5.8 ± 0.1 ^b	7.5 ± 0.2 ^a	4.6 ± 0.4 ^c
	264	4.7 ± 0.2 ^b	5.7 ± 0.2 ^a	6.1 ± 0.1 ^a	5.7 ± 0.2 ^a
	270	4.6 ± 0.1 ^b	4.4 ± 0.2 ^b	5.7 ± 0.1 ^a	5.3 ± 0.2 ^{ab}
	274	3.6 ± 0.2 ^c	4.6 ± 0.1 ^b	6.9 ± 0.6 ^a	5.0 ± 0.4 ^b
	278	2.9 ± 0.3 ^c	3.9 ± 0.4 ^b	5.3 ± 0.2 ^a	5.4 ± 0.2 ^a
	282	0.3 ± 0.1 ^c	1.4 ± 0.2 ^b	4.4 ± 0.5 ^a	4.1 ± 0.4 ^a
	284	0.2 ± 0.0 ^c	1.6 ± 0.3 ^b	2.6 ± 0.4 ^a	3.3 ± 0.3 ^a
C _{Ant} [OD ₅₂₀ g ⁻¹ (FM)]	234	21.5 ± 1.1 ^a	22.9 ± 2.4 ^a	17.4 ± 0.8 ^a	19.3 ± 1.6 ^a
	245	24.0 ± 1.9 ^a	16.6 ± 1.6 ^b	21.2 ± 1.0 ^{ab}	16.1 ± 1.3 ^b
	256	15.3 ± 2.0 ^a	20.6 ± 1.9 ^a	19.6 ± 0.8 ^a	17.6 ± 1.6 ^a
	264	12.3 ± 1.0 ^c	17.5 ± 1.7 ^{bc}	22.8 ± 0.9 ^{ab}	27.0 ± 0.6 ^a
	270	19.0 ± 1.7 ^b	26.6 ± 1.3 ^a	19.9 ± 1.0 ^b	26.5 ± 1.2 ^a
	274	18.9 ± 1.0 ^b	24.8 ± 1.5 ^a	11.5 ± 0.8 ^c	26.8 ± 1.9 ^a
	278	12.6 ± 1.0 ^b	15.0 ± 1.4 ^b	15.0 ± 0.7 ^b	23.2 ± 2.2 ^a
	282	17.8 ± 2.1 ^b	23.9 ± 1.6 ^a	10.4 ± 0.6 ^c	20.8 ± 2.2 ^{ab}
	284	16.8 ± 1.2 ^a	19.2 ± 4.0 ^a	7.7 ± 0.3 ^b	22.1 ± 2.3 ^a