

**Table S1.** Effect of distances between trees and seasonality on the photosynthetic indices.

	Stomatal conductance (mol H <sub>2</sub> O m <sup>-2</sup> s <sup>-1</sup> )			Photosynthetic rate (μmol CO <sub>2</sub> m <sup>-2</sup> s <sup>-1</sup> )			Transpiration rate (mmol H <sub>2</sub> O m <sup>-2</sup> s <sup>-1</sup> )		
	May	July	August	May	July	August	May	July	August
3x0.25	0.055 d	0.021 c	0.029 c	8.34 d	11.18 c	13.47 d	1.76 c	0.95 b	0.94 c
3x0.50	0.088 c	0.033 bc	0.042 bc	11.40 c	12.93 bc	15.67 c	2.21 bc	1.07 b	1.42 bc
3x0.75	0.106 b	0.037 b	0.053 b	12.33 b	14.17 b	18.99 b	2.49 ab	1.18 ab	1.69 b
3x1.00	0.137 a	0.051 a	0.072 a	13.58 a	17.60 a	21.17 a	2.89 a	1.51 a	2.11 a
F actual									
Factor A (distances)	**			**			**		
Factor B (Development stages)	**			**			**		
Interaction AB	ns			ns			ns		

The different letters in columns indicate significant differences. The data were processed using analysis of variance (Anova), the Turkey (HSD) test at the confidence level  $p = 0.05$ , \* $p < 0.05$ ; \*\* $p < 0.01$  shows significant differences, ns – no significant differences.

**Table S2.** Effect of distances between trees and seasonality on the photosynthetic pigments.

	Chlorophyll a mg g <sup>-1</sup> FW			Chlorophyll b mg g <sup>-1</sup> FW			Carotenenes (α+β) mg g <sup>-1</sup> FW		
	May	July	August	May	July	August	May	July	August
3x0.25	1.378 ab	2.272 b	2.059 a	0.133 ab	0.241 b	0.192 a	0.018 b	0.023 b	0.019 bc
3x0.50	1.560 b	2.331 b	1.986 a	0.153 b	0.253 b	0.189 a	0.018 b	0.020 ab	0.020 c
3x0.75	1.314 ab	1.910 a	2.069 a	0.120 a	0.194 a	0.199 a	0.015 a	0.018 a	0.017 a
3x1.00	1.131 a	2.013 ab	2.075 a	0.126 ab	0.211 a	0.192 a	0.015 a	0.019 a	0.018 ab
F actual									
Factor A (distances)	ns			ns			ns		
Factor B (Development stages)	*			**			*		
Interaction AB	ns			ns			ns		

The different letters in columns indicate significant differences. The data were processed using analysis of variance (Anova), the Turkey (HSD) test at the confidence level  $p = 0.05$ , \* $p < 0.05$ ; \*\* $p < 0.01$  shows significant differences, ns – no significant differences.

**Table S3.** Effect of distances between trees and seasonality on the carbohydrates.

	Fructose mg g <sup>-1</sup> FW			Glucose mg g <sup>-1</sup> FW			Sorbitol mg g <sup>-1</sup> FW			Starch mg g <sup>-1</sup> FW		
	May	July	August	May	July	August	May	July	August	May	July	August
3x0.25	5.24 ab	4.74 a	4.41 b	19.4 b	19.7 ab	22.35 a	33.43 b	29.37 ab	42.81 a	1.12 a	3.15 a	3.66 a
3x0.50	5.09 ab	3.87 b	5.89 a	21.9 a	20.34 a	23.25 a	34.81 b	29.79 ab	41.42 b	0.83 b	2.77 b	2.83 b
3x0.75	5.79 a	3.88 b	5.59 a	20 ab	18.48 b	22.47 a	37.8 a	27.06 b	41.45 ab	0.77 bc	2.57 b	2.07 c
3x1.00	4.44 b	3.79 b	5.33 ab	20.1 ab	20.97 a	22.23 a	33.43 b	30.76 a	42.04 ab	0.6 c	2 c	1.72 c
F actual												
Factor A (distances )		ns			*			ns			**	
Factor B (Development stages)		**			**			**			**	
Interaction AB		ns			ns			ns			ns	

The different letters in columns indicate significant differences. The data were processed using analysis of variance (Anova), the Turkey (HSD) test at the confidence level  $p = 0.05$ , \* $p < 0.05$ ; \*\* $p < 0.01$  shows significant differences, ns – no significant differences.