

**Table S1.** The influence of the position and composting after mushroom cultivation on fruit firmness in 2008-2016.

Year	OR1		OR2		Mean		Mean	
	C	M	C	M	OR1	OR2	C	M
2008	200.3 a	201.5 a	200.0 a	189.3 a	200.9 A	194.6 A	200.1 A	195.4 A
2009	205.8 a	220.3 a	193.5 a	217.5 a	213.0 A	205.5 A	199.6 A	218.9 A
2010	209.4 b	199.1 ab	188.3 a	200.1ab	204.3 A	194.2 A	198.8 A	200.0 A
2011	201.1 b	183.9 a	204.3 b	200.9 b	192.5 A	202.7 B	202.7 <b>B</b>	192.5 A
2012	188.4 ab	184.6 a	194.1 ab	199.2 b	186.5 A	196.7 B	191.3 A	191.9 A
2013	190.9 a	191.1 a	210.2 b	205.3 b	191.0 A	207.8 B	200.6 A	198.2 A
2014	214.6 a	217.5 a	220.4 a	228.4	216.1 A	224.4 A	217.5 A	222.9 A
2015	231.9 a	206.3 a	221.5 a	208.6 a	219.1 A	215.1 A	226.7 A	207.4 A
2016	184.4 a	182.6 a	187.5 a	197.0 a	183.5 A	192.3 A	185.9 A	189.8 A
	203.0 a	198.5 a	202.2 a	205.2 a	200.8 A	203.7 A	202.6 A	201.8 A

Two-factor analysis. Means in rows marked with the same letters do not differ significantly for the significance level of  $p=0.05$ .

<sup>1</sup> lowercase letters in the lines indicate significant differences between planting area × mulching,

<sup>2</sup> upper case letters in the lines indicate significant differences between planting area,

<sup>3</sup> bold upper-case letters in the lines indicate significant differences between mulching, (at  $p \leq 0.05$ , according to the Duncan test).

OR1- orchard after replantation, OR2- orchard on virgin soil, C- control without mulching, M- mulching.

**Table S2.** Firmness of the Łutówka cultivar in 2006-2013.

Treatment	Firmness			
	Planting area			
	OR1	OR2	Mean	
C	203.0 a	202.2 a	202.6	<b>A</b>
M	198.5 a	205.2 a	201.8	<b>A</b>
Mean	200.8 A	203.7 A		

<sup>1</sup> orchard × treatment; the same letters are not significantly different at  $\alpha = 0.05$  (Duncan's test).

<sup>2</sup> means that the same capital letters in the row are not significantly different at  $\alpha = 0.05$  (Duncan's test).

<sup>3</sup> means that the same capital bold letters in the column are not significantly different at  $\alpha = 0.05$  (Duncan's test).

OR1- orchard after replantation, OR2- orchard on virgin soil, C- control without mulching, M- mulching.

**Table S3.** The influence of the site and mulching on the hydrolytic acidity of fruit in 2008-2016.

Treatment	Acidity			
	Planting area			
	OR1	OR2	Mean	
C	1.73 ab	1.76 b	1.75	<b>A</b>
M	1.70 a	1.72 ab	1.71	<b>A</b>
Mean	1.72 A	1.75 A		

<sup>1</sup> see table S2.

**Table S4.** The influence of the site and mulching on titratable acidity of fruit in 2008-2016.

Year	OR1		OR2		Mean		Mean	
	C	M	C	M	OR1	OR2	C	M
2008	2.3 c	2.2 bc	2.1 b	1.9 a	2.2 B	2.0 A	2.2 A	2.1 B
2009	2.0 b	1.3 a	1.7 b	1.8 b	1.6 A	1.7 A	1.8 B	1.6 A
2010	2.0 b	1.6 a	1.8 ab	1.9 ab	18.8 A	1.9 A	2.0 A	1.8 A
2011	1.9 a	1.9 a	2.0 ab	2.1 b	1.9 A	2.0 B	2.0 A	2.0 A
2012	1.3 a	1.6 c	1.8 d	1.4 b	1.4 A	1.6 B	1.5 A	1.5 A
2013	1.8 a	1.8 a	1.6 a	1.6 a	1.8 B	1.6 A	1.7 A	1.7 A
2014	1.5 a	1.6 a	1.6 a	1.6 a	1.6 A	1.6 A	1.6 A	1.6 A
2015	1.6 a	1.6 a	1.6 a	1.6 a	1.6 A	1.6 A	1.6 A	1.6 A
2016	1.7 b	1.5 a	1.7 b	1.6 ab	1.6 A	1.7 A	1.7 B	1.6 A

<sup>1</sup> see table S1.