

Table S1. The weather conditions in the apple orchard in the year 2021 against the background of long-term data.

Month	Sum of rainfalls in 2021 [mm·m ⁻²]	Rainfalls [1991-2020]	Average temperature in 2021 [°C]	Temperature [1991-2020]
January	31.0	31.5	-1.4	-1.6
February	27.6	26.2	-2.0	-0.4
March	18.3	29.1	4.0	3.3
April	55.3	35.7	6.5	8.5
May	62.3	55.8	12.4	13.9
June	69.2	64.4	19.7	16.8
July	118.8	82.1	21.7	20.5
August	140.1	60.2	17.2	18.6
September	31.7	50.3	13.6	13.9
October	9.5	39.6	10.0	10.2
November	35.4	39.4	5.3	5.1
December	18.6	36.5	-1.1	0.3

Table S2. The p-value of the influence of individual experimental factors and interactions on the physicochemical properties of fruit shipped directly after harvest.

		Firmness	SSC	TA
6 Weeks of Transport				
Harvest Date (A)	optimal harvest date	65.8 ± 2.0	12.8 ± 0.3	0.350 ± 0.011
	delayed harvest	55.9 ± 1.4	12.6 ± 0.3	0.297 ± 0.012
	p-value	<0.0001	0.1537	<0.0001
Treatment Applied (B)	Control	47.2 ± 2.5	12.5 ± 0.3	0.321 ± 0.011
	Harvista™	57.1 ± 1.7	12.2 ± 0.3	0.308 ± 0.011
	SmartFresh™	67.7 ± 1.1	13.8 ± 0.4	0.347 ± 0.011
	Harvista™ + SmartFresh™	71.3 ± 1.3	12.4 ± 0.3	0.319 ± 0.011
Days of Shelf-life (C)	p-value	<0.0001	<0.0001	<0.0001
	0	67.7 ± 1.7	12.7 ± 0.2	0.351 ± 0.010
	7	60.8 ± 1.7	12.6 ± 0.3	0.323 ± 0.013
	14	54.1 ± 1.6	12.8 ± 0.4	0.296 ± 0.011
	p-value	<0.0001	0.2485	<0.0001
A*B		<0.0001	<0.0001	0.0003
		<0.0001	0.1589	0.0007
A*C		<0.0001	<0.0001	<0.0001
		0.2673	<0.0001	0.0013
8 Weeks of Transport				
Harvest Date (A)	optimal harvest date	66.6 ± 2.7	12.5 ± 0.2	0.321 ± 0.011
	delayed harvest	53.5 ± 2.1	12.5 ± 0.3	0.265 ± 0.012
	p-value	<0.0001	0.9167	<0.0001
Treatment Applied (B)	Control	48.2 ± 2.2	12.3 ± 0.2	0.268 ± 0.010
	Harvista™	57.9 ± 2.8	12.8 ± 0.3	0.268 ± 0.011
	SmartFresh™	63.7 ± 2.6	12.7 ± 0.3	0.323 ± 0.010
	Harvista™ + SmartFresh™	70.3 ± 2.0	12.2 ± 0.2	0.311 ± 0.016
Days of Shelf-life (C)	p-value	<0.0001	<0.0001	<0.0001
	0	65.3 ± 1.7	12.4 ± 0.1	0.311 ± 0.013
	7	61.9 ± 2.9	12.6 ± 0.4	0.309 ± 0.010
	14	53.0 ± 2.7	12.6 ± 0.3	0.259 ± 0.013

	p-value	<0.0001	0.0311	<0.0001
A*B		<0.0001	<0.0001	0.0330
A*C		0.0031	0.0002	<0.0001
B*C	p-value	0.0712	0.0075	<0.0001
A*B*C		0.1127	0.0138	<0.0001

SSC – soluble solids content; TA – titratable acidity; optimal harvest date – Harvest I ; delayed harvest – Harvest II; TM—trademark; \pm , standard deviation.

Table S3. The p-value of the influence of individual experimental factors and interactions on the physicochemical properties of fruit shipped after 9 months of storage.

		Firmness	SSC	Acidity
6 Weeks of Transport				
Harvest Date (A)	optimal harvest date	60.3 \pm 1.4	12.6 \pm 0.3	0.227 \pm 0.008
	delayed harvest	51.7 \pm 1.9	12.4 \pm 0.3	0.212 \pm 0.008
	p-value	<0.0001	0.0007	<0.0001
Treatment Applied (B)	Control	42.7 \pm 1.7	12.6 \pm 0.3	0.189 \pm 0.007
	Harvista TM	47.7 \pm 1.2	12.0 \pm 0.2	0.216 \pm 0.010
	SmartFresh TM	63.3 \pm 2.2	13.3 \pm 0.3	0.236 \pm 0.010
	Harvista TM + SmartFresh TM	70.3 \pm 1.6	12.2 \pm 0.2	0.238 \pm 0.007
Days of Shelf-life (C)	p-value	<0.0001	<0.0001	<0.0001
	0	62.0 \pm 2.2	12.6 \pm 0.3	0.240 \pm 0.008
	7	56.5 \pm 1.5	12.6 \pm 0.3	0.226 \pm 0.011
	14	49.5 \pm 1.2	12.3 \pm 0.2	0.193 \pm 0.007
	p-value	<0.0001	0.0082	<0.0001
A*B		<0.0001	<0.0001	0.6437
	A*C		0.7604	0.1868
	B*C	p-value	<0.0001	0.0012
	A*B*C		<0.0001	0.4212
8 Weeks of Transport				
Harvest Date (A)	optimal harvest date	54.2 \pm 1.5	12.6 \pm 0.3	0.224 \pm 0.009
	delayed harvest	49.1 \pm 1.8	12.5 \pm 0.3	0.223 \pm 0.008
	p-value	<0.0001	0.0513	0.6740
Treatment Applied (B)	Control	41.2 \pm 1.2	12.3 \pm 0.4	0.188 \pm 0.008
	Harvista TM	44.1 \pm 0.6	11.7 \pm 0.2	0.220 \pm 0.010
	SmartFresh TM	58.3 \pm 2.4	13.5 \pm 0.3	0.240 \pm 0.009
	Harvista TM + SmartFresh TM	63.0 \pm 2.3	12.6 \pm 0.2	0.244 \pm 0.007
Days of Shelf-life (C)	p-value	<0.0001	<0.0001	<0.0001
	0	57.5 \pm 1.6	12.4 \pm 0.3	0.246 \pm 0.008
	7	52.7 \pm 1.7	12.5 \pm 0.2	0.221 \pm 0.011
	14	44.7 \pm 1.6	12.7 \pm 0.3	0.203 \pm 0.007
	p-value	<0.0001	0.0012	<0.0001
A*B		<0.0001	0.0992	0.0011
	A*C		0.0009	0.2829
	B*C	p-value	<0.0001	0.0002
	A*B*C		0.1441	0.0607

SSC – soluble solids content; TA – titratable acidity; optimal harvest date – Harvest I ; delayed harvest – Harvest II; TM—trademark; \pm , standard deviation.