Supplementary methods.

Samples were composed by three fruit typically with 12-15g in total aliquots and processed with mortar and pestle. The pH parameter was determined with a pHmeter (Hanna Edge®). To determine the total soluble solids (TSS) content, a few drops of tomato juice were placed in a refractometer (Milwaukee MA871, Rocky Mount, USA) and expressed in °Brix, Total titratable acidity (TTA) was titrimetrically determined with a 0.1 mol L^{-1} NaOH solution until reaching a pH of 8.2 (AOAC, 1980). TTA was expressed in g of citric acid per kg of fruit fresh weight.

Supplementary table 1. pH, TSS (total soluble solids), TTA (total titratable acidity) and RATIO (TSS/TTA) in control, 20 mM ascorbic acid and 10 mM H_2O_2 treatments.

		pH			TSS (°Brix)			TTA (g citric acid kg^{-1} FW)			Ratio (TSS/TTA)		
		Control	AA	H_2O_2	Control	AA	H_2O_2	Control	AA	H_2O_2	Control	AA	H_2O_2
WT	MG	4.3 ± 0.2 aA1	4.2 ± 0.2 aA1	4.3 ± 0.1 aA1	4.5 ± 0.2 aA1	4.7 ± 0.4 aA1	4.9 ± 0.7 aA1	4.7 ± 0.6 aA1	3.6 ± 0.8 aA1	2.9 ± 0.2 aA1	12.8 ± 1.2 aA2	10.7 ± 0.8 aA1	13.1 ± 0.3 aA1
	BR	3.9 ± 0.1 aA1	3.9 ± 0.1 aA1	3.9 ± 0.1 aA1	5.6 ± 0.3 aA2	6.3 ± 1.4 aA2	6.1 ± 1.4 aA1	6,9.0 ± 0.2 bA2	6.6 ± 0.7 bA2	6.5 ± 0.2 bA2	8.0 ± 0.4 aA1	9.6 ± 1.2 aA1	10.3 ± 1.4 aA1
	OR	3.9 ± 0.1 aA1	4.0 ± 0.0 aA1	4.0 ± 0.1 aA1	5.8 ± 0.6 aA2	6.7 ± 1.2 aA23	6.3 ± 2.1 aA1	7.9 ± 0.7 bA2	6.2 ± 0.5 bA2	6.6 ± 0.6 aA2	7.2 ± 1.7 aA1	8.3 ± 1.4 aA1	11.5 ± 1.9 aA1
	RR	3.9 ± 0.1 aA1	3.9 ± 0.1 aA1	3.8 ± 0.0 aA1	7.0 ± 0.2 aA3	7.2 ± 0.3 aA3	6.9 ± 2.3 aA1	7.3 ± 0.1 aB2	7.1 ± 0.7 aB2	5.9 ± 0.6 aA2	9.7 ± 0.4 aA1	13.8 ± 1.3 aB2	16.7 ± 1.0 aB2
GGP-5261	MG	4.3 ± 0.2 aA1	4.3 ± 0.1 aA1	4.2 ± 0.1 aA1	4.5 ± 0.4 aA1	4.5 ± 0.1aA1	4.2 ± 0.1 aA1	3.1 ± 0.3 aA1	3.8 ± 0.5 aA1	2.8 ± 0.5 aA1	15.1 ± 1.0 aA2	10.8 ± 0.5 aA1	12.9 ± 0.8 aA1
	BR	4.1 ± 0.1 aA1	4.0 ± 0.1 aA1	3.9 ± 0.2 aA1	5.2 ± 0.4 aA12	4.8 ± 0.1 aA1	4.8 ± 1.8 aA12	4.8 ± 0.2 aA2	5.0 ± 0.1 aA2	4.8 ± 0.1 aA2	12.2 ± 1.1 bA1	10.7 ± 1.2 aA1	11.7 ± 0.6 aA1
	OR	3.9 ± 0.1 aA1	3.9 ± 0.1 aA1	3.9 ± 0.1 aA1	6.5 ± 0.5 aA2	6.1 ± 0.4 aA2	6.2 ± 1.1 aA2	5.5 ± 0.3 aA2	6.2 ± 0.2 bA3	5.0 ± 0.6 aA2	12.8 ± 1.7 bA2	9.4 ± 0.3 aA1	11.6 ± 0.7 aA1
	RR	3.9 ± 0.4 aA1	4.0 ± 0.1 aA1	4.0 ± 0.1 aA1	7.9 ± 0.6 aA3	7.9 ± 1.4 aA2	7.5 ± 0.9 aA1	7.9 ± 0.5 aB3	5.7 ± 0.1 aA3	5.0 ± 0.3 aA2	12.4 ± 1.2 bA1	14.7 ± 1.6 aB2	16.9 ± 0.7 aB1
GGP-49C12	MG	4.4 ± 0.2 aA1	4.4 ± 0.2 aA1	4.3 ± 0.2 aA1	3.9 ± 0.5 aA1	3.7 ± 0.6 a A1	3.8 ± 0.8 aA1	3.2 ± 0.2 aA1	2.7 ± 0.4 aA1	2.4 ± 0.3 aA1	12.7 ± 1.4 aA12	13.8 ± 0.8 aA1	14.1 ± 0.8 aA12
	BR	4.0 ± 0.1 aA1	4.0 ± 0.1 aA1	3.9 ± 0.1 aA1	4.0 ± 0.6 aA1	4.1 ± 0.9 aA1	4.7 ± 0.7 aA1	4.3 ± 0.3 aA2	4.5 ± 0.4 aA2	4.8 ± 0.6 aA2	15.0 ± 0.3 bB2	9.3 ± 1.5 aA1	10.1 ± 0.5 aA1
	OR	3.9 ± 0.1 aA1	3.7 ± 0.4 aA1	3.7 ± 0.1 aA1	5.1 ± 0.5 aA12	5.5 ± 0.8 aA12	5.5 ± 0.6 aA12	5.1 ± 0.1 aA3	4.8 ± 0.2 aA2	5.0 ± 0.45 aA2	9.4 ± 1.3 bA1	11.3 ± 0.2 aA1	12.4 ± 0.2 aA1
	RR	3.9 ± 0.1 aA1	3.7 ± 0.5 aA1	3.7 ± 0.5 aA1	7.2 ± 0.4 aA2	6.5 ± 0.3 aA2	6.6 ± 0.8 aA2	7.8 ± 0.4 aB4	4.6 ± 0.5 aA2	4.8 ± 0.4 aA2	11.2 ± 1.6 bA1	13.0 ± 0.3 aB1	15.5 ± 0.3 aB2

Lower-case letters denote statistical differences between different genotypes in the same ripening stage and treatment, capital letters denote statistical differences between same genotype and ripening stage on different treatments and numbers denote statistical differences between ripening stages on the same genotype (ANOVA, P≤0.05). Values are the mean of three-independent experiments.