Supplementary Figure S1. Illustrative picture showing the experimental design used in this study with the representative phenotype of sweet pepper (*Capsicum annuum* L.) fruits at different stages and treatments: immature green, breaking point 1 (BP1), breaking point 2 without NO treatment (BP2 – NO), breaking point 2 with NO treatment (BP2 + NO), and ripe red. Fruits were subjected to a NO-enriched atmosphere (5 ppm) in a hermetic box for 1 h and were then stored at room temperature (RT) for 3 days. Reproduced with permission from González-Gordo et al. (2022b) [46].

Supplementary Table S1. List of the 53 different isozymes of G6PDH belonging to 15 different plant species used in this work for phylogenetic analysis.

Plant species	G6PDH isozyme	Protein ID	Reference
Pepper (*Capsicum annuum*)	CaG6PDH1	XP_016561682.1	The present study
	CaG6PDH2	XP_016570698.1	
	CaG6PDH3	XP_016580465.1	
	CaG6PDH4	XP_016573493.1	
Arabidopsis thaliana	AtG6PDH1	Q43727.2	Wendt et al., 1999; Wakao and Benning, 2004)
	AtG6PDH2	Q9FY99.2	
	AtG6PDH3	Q8L743.2	
	AtG6PDH4	Q93ZW0.1	
	AtG6PDH5	Q9LK23.1	
	AtG6PDH6	Q9FJI5.1	
Alfalfa (*Medicago sativa*)	MsG6PDH1	AAB41552.1	(Wendt et al., 1999)
Tobacco (*Nicotiana tabacum*)	NtG6PDH1	CAA04994.1	(Wendt et al., 1999)
	NtG6PDH2	AAF87216.1	
	NtG6PDH3	CAA04992.1	
Rice (*Oryza sativa*)	OsG6PDH1	AAS07054.1	(Wendt et al., 1999)
	OsG6PDH2	BAC84352.1	
	OsG6PDH3	CAC09489.2	
Parsley (*Petroselinum crispum*)	PcG6PDH1	AAB69318.1	(Wendt et al., 1999)
	PcG6PDH2	AAB69319.1	
	PcG6PDH3	AAB69317.1	
Potato (*Solanum tuberosum*)	StG6PDH1	CAA52442.1	(Wendt et al., 1999)
	StG6PDH2	CAA58775.1	
	StG6PDH3	CAB52708.1	
Spinach (*Spinacia oleracea*)	SoG6PDH1	CAA03939.1	(Wendt et al., 1999)
Wheat (*Triticum aestivum*)	TaG6PDH1	BAA97663.1	(Wendt et al., 1999)
Rubber tree (*Hevea brasiliensis*)	HbG6PDH1	AIE47266.1	(Long et al., 2016)
	HbG6PDH2	AIE47267.1	
	HbG6PDH3	AIE47268.1	
	HbG6PDH4	AIE47269.1	
Black cottonwood (*Populus trichocarpa*)	PtG6PDH1	EEE79649.2	(Long et al., 2016)
	PtG6PDH2	ERP53365.1	
	PtG6PDH3	EEE94856.1	
	PtG6PDH4	EEF03929.1	
Castor oil (*Ricinus communis*)	RcG6PDH1	EEF47431.1	(Long et al., 2016)
	RcG6PDH2	EEF32168.1	
	RcG6PDH3	EEF50009.1	
Maize (*Zea mays*)	ZmG6PDH1	AFW57831.1	(Long et al., 2016)
	ZmG6PDH2	DAA45780.1	
	ZmG6PDH3	NP_001348206.1	
	ZmG6PDH4	ACG39996.1	
Tomato (*Solanum lycopersicum*)	SlG6PDH1	XP_004230338.1	Tomato proteome
	SlG6PDH2	XP_004231802.1	
	SlG6PDH3	XP_004239245.1	
	SlG6PDH4	XP_004243567.1	

Soybean (*Glycine max*)	GmG6PDH1	XP_003520786.1	(Zhao et al., 2020)
	GmG6PDH2	NP_001241264.1	
	GmG6PDH3	XP_003533032.1	
	GmG6PDH4	XP_003547679.1	
	GmG6PDH5	XP_003518668.1	
	GmG6PDH6	XP_003553875.1	
	GmG6PDH7	XP_003552660.1	
	GmG6PDH8	XP_014633122.1	
	GmG6PDH9	XP_003554604.1	

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