Supplementary Materials

Tryptophan decarboxylase (TDC) in sweet pepper (*Capsicum annuum* L.): Gene expression analysis during fruit ripening and after nitric oxide exposure

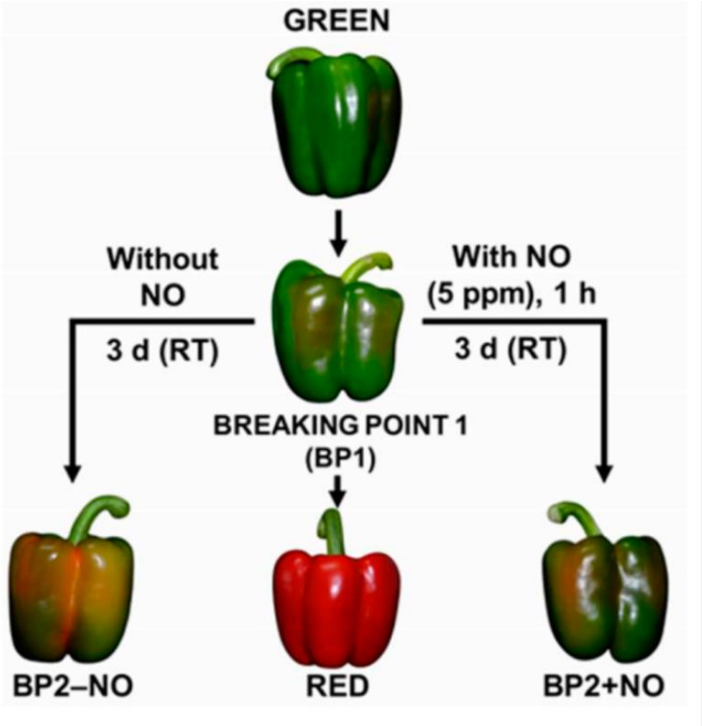
Jorge Taboada, Salvador González-Gordo, José M Palma, Francisco J Corpas*

Department of Stress, Development and Signaling in Plants, Group of Antioxidants, Free Radicals and Nitric Oxide in Biotechnology, Food and Agriculture, Estación Experimental del Zaidín (Spanish National Research Council, CSIC), C/Profesor Albareda, 1, 18008 Granada, Spain.

Supplementary Table 1. List of the different species and TDC proteins used for the phylogenetic analysis

Plant species	TDCs	Protein ID	Reference
Pepper (*Capsicum annuum* L.)	Putative CaTDC1	XP_016567730.1	Present study
	Putative CaTDC2	XP_016570150.1	Present study
	CaTDC3	NP_001312016.1	(55)
	CaTDC4	XP_016580730.1	Present study
	Putative CaTDC5	XP_016541857.1	(55)
Rice (*Oryza sativa* subs. japonica)	OsTDC1	XP_015648701.1	(58)
	OsTDC2	XP_015644906.1	
Maize (*Zea mays*)	ZmTDC1	XP_008680226.1	(94)
Cassava (*Manihot esculenta*)	MeTDC1	XP_021629195.1	(80)
	MeTDC2	XP_021631045.2	
Black cohosh (*Actaea racemosa*)	ArTDC1	ADD71923	(68)
	ArTDC2	ADD71924	
	ArTDC3	CCO62221	
Happy tree (*Camptotheca acuminata*)	CamaTDC1	AAB39708	(68)
	CamaTDC2	AAB39709	
	CamaTDC3	AON76721	
Madagascar periwinkle (*Catharanthus roseus*)	CrTDC1	P17770	(68)
Kratom (*Mitragyna speciosa*)	MsTDC1	AEQ01059	(68)
Ophiorrhiza prostrata	OprTDC1	ABU40982	(68)
Ophiorrhiza pumila	OpuTDC1	BAC41515	(68)
Devil pepper (*Rauvolfia verticillata*)	RvTDC1	ADL28270	(68)
Tabernaemontana elegans	TeTDC1	AEY82396	(68)
Grapevine (*Vitis vinífera*)	VvTDC1	XP_010652425.1	(95)
Sweet cherry (*Prunus avium*)	PaTDC1	XP_021831305.1	(96)
Mulberry (*Morus nigra*)	MnTDC1	XP_024018420.1	(97)
Tomato (*Solanum lycopersicum*)	SlTDC1	XP_004243301.1	(89)
	SlTDC2	XP_004243334.1	
	SlTDC3	A0A3Q7IZK4	
	SlTDC4	K4BG32	
	SlTDC5	A0A3Q7FJP7	

Herbaceous Peony (*Paeonia lactiflora* Pall.)	PlTDC1	ART46241.1	(73)
Banana (*Musa* spp.)	MaTDC1	XP_009397439.1	(75)
	MaTDC2	XP_009408402.1	
	MaTDC3	XP_009407716.1	
	MaTDC4	XP_009409234.1	
	MaTDC5	XP_009414096.1	
	MaTDC6	XP_009414098.1	
	MaTDC7	XP_009414800.1	
	MaTDC8	XP_009381294.1	



S 1. Illustrative picture showing the experimental design used in this study with the representative phenotypes 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 Taboada et al., 2023 (39).

Please cite this paper as:
Taboada, J., González-Gordo, S., Palma, J.M. and Corpas, F. 2023. Tryptophan decarboxylase (TDC) in sweet pepper (Capsicum annuum L.): Gene expression analysis during fruit ripening and after nitric oxide exposure. Melatonin Research. 6, 3 (Aug. 2023), 277-295. DOI:https://doi.org/https://doi.org/10.32794/mr112500155.