

The polygalacturonase gene *BcMF2* from *Brassica campestris* is associated with intine development

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Supplemental Material

Supplementary Table 1 Polygalacturonase amino acid sequences used in the molecular phylogenetic analysis.

Abbreviation	Species (gene name, expression)	SwissProt No.	GenBank No.
BcMF2	<i>Brassica campestris</i>	—	EU181170
Endopolygalacturonase			
Actde.pg	<i>Actinidia deliciosa</i> (leaf & bud)	P35336	L12019
Actde2.pg	<i>Actinidia deliciosa</i> (fruit)	—	AAF71160
Arath11.pg	<i>Arabidopsis thaliana</i> (root & seedling)	Q38958	X98130
Arath12.pg	<i>Arabidopsis thaliana</i>	O22699	AC002292
Brana1.pg	<i>Brassica napus</i> (PG35-8) (pod dehiscence)	Q42399	X95800
Brana2.pg	<i>Brassica napus</i> (SAC66) (pod development)	Q42636	Z49971
Brana3.pg	<i>Brassica napus</i> (PGAZ) (leaf abscission)	—	AJ250919
Cucme1.pg	<i>Cucumis melo</i> (fruit ripening)	O81244	AF062465
Cucme2.pg	<i>Cucumis melo</i> (MPG 2) (fruit ripening)	O81245	AF062466
Cucme3.pg	<i>Cucumis melo</i> (fruit ripening)	O81246	AF062467
Cucsa.pg	<i>Cucumis sativus</i> (stress induced)	—	AB035890
Glyma1.pg	<i>Glycine max</i> (roots, wound response)	Q9SWS3	AF128266
LycesA.pg	<i>Lycopersicon esculentum</i> (PG2A, fruit)	P05117	X04583
Lyces1.pg	<i>Lycopersicon esculentum</i> (TAPG1) (stigma, style)	O22311	AF001000
Lyces2.pg	<i>Lycopersicon esculentum</i> (TAPG2) (stigma, style)	Q96487	AF001001
Lyces3.pg	<i>Lycopersicon esculentum</i> (TAPG3) (abscission)	O22310	AF000999
Lyces4.pg	<i>Lycopersicon esculentum</i> (TAPG4) (stigma, style)	Q96488	U70481
Lyces5.pg	<i>Lycopersicon esculentum</i> (TAPG5) (abscission)	O22313	AF001003
Lyces6.pg	<i>Lycopersicon esculentum</i> (TAPG6)	O22610	AF029230

Lyces7.pg	<i>Lycopersicon esculentum</i> (stigma, style)	—	AF072732
Lyces8.pg	<i>Lycopersicon esculentum</i> (wound response)	—	AF118567
Lyces9.pg	<i>Lycopersicon esculentum</i> (seed)	—	AF138858
Maldo.pg	<i>Malus domestica</i> (fruit)	P48978	L27743
Orysa.pg	<i>Oryza sativa</i>	—	AP003140
Peram.pg	<i>Persea americana</i> (fruit)	Q02096	X66426
Pissa.pg	<i>Pisum sativum</i>	—	AF361321
Prupe1.pg	<i>Prunus persica</i> (PRF5)(fruit)	P48979	X76735
Prupe3.pg	<i>Prunus persica</i>	Q43063	X77231
Rubid.pg	<i>Rubus idaeus</i> (fruit)	O65886	AJ224147
TsPG	<i>Turnera subulata</i> (short style)	—	AY185765
Vitvi.pg	<i>Vitis vinifera</i> (fruit)	—	AY043233
Exopolygalacturonase			
Arath1.epg	<i>Arabidopsis thaliana</i> (flower)	P49063	X72292
Arath2.epg	<i>Arabidopsis thaliana</i> (PGA2) (flower)	O65401	X73222
Pollen Polygalacturonase			
Goshi.pp	<i>Gossypium hirsutum</i> (G9) (pollen)	Q39786	U09717
Medsa.pp	<i>Medicago sativa</i> (P73)(pollen)	Q40312	U20431
Nicta.pp	<i>Nicotiana tabacum</i> (Npg1) (pollen)	Q05967	X71020
Nicta2.pp	<i>Nicotiana tabacum</i> (sperm cell)	—	AF248538
Salgi2.pp	<i>Salix gilgiana</i> (male flower)	Q9MBB9	AB029458
TsPP	<i>Turnera subulata</i> (pollen)	—	AY185764
Bran.pep	<i>Brassica napus</i> (Sta 44-4)(pollen)	P35337	L19879
Oenor.pep	<i>Oenothera organensis</i> (pollen)	P24548	—
Phlpr.pep	<i>Phleum pratense</i> (pollen)	Q9XG86	AJ238848
Zeama1.pep	<i>Zea mays</i> (pollen)	P26216	X57627
Braol.pp	<i>Brassica oleracea</i> (PG1) (pollen)	—	AF518563

Arath1.pp	<i>Arabidopsis thaliana</i> (PGA3) (pollen)	—	AY096534
Arath2.pp	<i>Arabidopsis thaliana</i> (PGA4) (pollen)	—	NM_100158

Note: The terminations of abbreviations for the individual enzyme specificities following Markovič and Janeček (2001) are, pg (endopolygalacturonase), epg (exopolygalacturonase) pp (pollen polygalacturonase) pep (pollen exopolygalacturonase).