SUPPLEMENTARY DATA

Table S1. Monosaccharide composition of pectin samples (mol % total sugars) and yields (weight %).

Pectin Samples	GalA	Rha	Ara	Gal	GalA / Rha	(Ara+Gal)/ Rha	Yield
MN							
Orange	81.71 ± 0.43	2.18 ± 0.09	9.19 ± 0.43	6.94 ± 0.09	37.6	7.4	90.7
Lemon	87.36 ± 0.81	1.83 ± 0.10	6.07 ± 0.54	4.75 ± 0.37	47.8	5.9	89.6
Lime	87.13 ± 1.34	1.81 ± 0.19	8.55 ± 0.81	2.53 ± 0.33	48.6	6.1	92.6
Grapefruit	87.33 ± 0.78	2.69 ± 0.02	6.36 ± 0.50	3.63 ± 0.30	32.5	3.7	92.7
HN							
Orange	86.23 ± 2.81	2.89 ± 0.26	2.19 ± 0.68	8.69 ± 2.09	29.9	3.8	92.1
Lemon	91.26 ± 0.56	1.86 ± 0.10	1.23 ± 0.03	5.65 ± 0.37	49.1	3.7	96.3
Lime	92.23 ± 2.18	2.75 ± 0.46	1.79 ± 0.43	3.24 ± 0.94	34.1	1.8	90.8
Grapefruit	89.49 ± 4.48	3.15 ± 0.16	1.49 ± 0.08	4.64 ± 0.23	28.4	1.9	95.1
MO							
Orange	81.70 ± 0.61	1.78 ± 0.01	12.68 ± 0.54	3.85± 0.06	46.0	9.3	85.3
Lemon	82.78 ± 2.05	1.85 ± 0.05	12.20 ± 1.65	3.18 ± 0.35	44.9	8.3	87.2
Lime	83.30 ± 0.11	1.72 ± 0.20	12.88 ± 0.31	2.10 ± 0.01	48.7	8.8	86.0
Grapefruit	85.14 ± 0.81	2.08 ± 0.11	10.20 ± 0.62	2.59 ± 0.31	41.0	6.2	88.3
HO							
Orange	82.28 ± 0.01	1.86 ± 0.11	11.13 ± 0.10	4.73 ± 0.04	42.5	8.1	92.9
Lemon	87.98 ± 0.71	1.35 ± 0.05	7.79 ± 0.41	2.88 ± 0.25	63.2	8.0	93.9
Lime	85.50 ± 0.15	1.46 ± 0.13	10.87 ± 0.28	2.17 ± 0.00	55.3	8.3	93.2
Grapefruit	84.54 ± 0.61	2.36 ± 0.11	10.27 ± 0.35	2.83 ± 0.14	37.3	5.6	92.0

Values are the average of duplicates (± s.d.)

Man ≤ 6.09 mol %; Glc ≤ 2.88 mol %; Xyl ≤ 0.98 mol %; Fuc ≤ 0.25 mol %

Table S2. Macromolecular features of extracted pectin samples.

	M_w (kDa)	PDI	IV (dL/g)
MN			
Orange	244.79 ± 9.40	1.82 ± 0.18	6.19 ± 0.04
Lemon	223.18 ± 0.39	1.73 ± 0.06	7.73 ± 0.00
Lime	218.00 ± 13.98	1.58 ± 0.10	8.07 ± 0.33
Grapefruit	204.79 ± 3.40	1.94 ± 0.04	5.86 ± 0.06
HN			
Orange	186.39 ± 5.15	2.00 ± 0.05	4.35 ± 0.04
Lemon	159.58 ± 1.19	1.84 ± 0.06	5.46 ± 0.04
Lime	146.06 ± 2.98	1.60 ± 0.03	6.14 ± 0.08
Grapefruit	149.05 ± 0.43	2.06 ± 0.00	4.05 ± 0.00
MO			
Orange	414.64 ± 3.99	1.30 ± 0.08	7.44 ± 0.09
Lemon	393.38 ± 11.31	1.33 ± 0.05	8.99 ± 0.25
Lime	372.06 ± 3.51	1.29 ± 0.11	10.57 ± 0.20
Grapefruit	286.76 ± 11.97	1.56 ± 0.12	7.56 ± 0.53
HO			
Orange	236.50 ± 14.70	1.64 ± 0.02	6.43 ± 0.45
Lemon	242.82 ± 20.43	1.40 ± 0.03	7.80 ± 0.44
Lime	236.50 ± 14.70	1.48 ± 0.02	8.46 ± 0.22
Grapefruit	206.53 ± 0.28	1.72 ± 0.05	6.18 ± 0.05

M_w, weight-average molecular weight

PDI, polydispersity index (M_w/M_n); M_n, number-average molecular weight

IV, Intrinsic viscosity

Values are the average of two replicates (± s.d.).

Table S3. Monosaccharide composition of HG domains (mol % total sugars).

	GalA	Rha	Ara	Xyl	Man	Gal	Glc
MN							
orange	99.90 ± 0.003	0.03 ± 0.001	0.02 ± 0.002	0.02 ± 0.001	0.00 ± 0.002	0.02 ± 0.000	0.01 ± 0.000
lemon	99.89 ± 0.019	0.03 ± 0.000	0.02 ± 0.005	0.01 ± 0.003	0.00 ± 0.003	0.03 ± 0.018	0.01 ± 0.001
lime	99.93 ± 0.011	0.03 ± 0.002	0.02 ± 0.002	0.00 ± 0.007	0.00 ± 0.000	0.01 ± 0.001	0.00 ± 0.005
grapefruit	99.91 ± 0.004	0.03 ± 0.001	0.02 ± 0.001	0.02 ± 0.004	0.00 ± 0.000	0.01 ± 0.000	0.01 ± 0.000
MO							
orange	98.51 ± 1.868	0.04 ± 0.012	0.28 ± 0.310	0.60 ± 0.821	0.25 ± 0.348	0.23 ± 0.297	0.09 ± 0.080
lemon	99.78 ± 0.195	0.08 ± 0.079	0.04 ± 0.033	0.04 ± 0.036	0.00 ± 0.002	0.04 ± 0.035	0.02 ± 0.015
lime	99.92 ± 0.007	0.03 ± 0.005	0.01 ± 0.003	0.01 ± 0.003	0.00 ± 0.000	0.01 ± 0.001	0.01 ± 0.000
grapefruit	99.91 ± 0.011	0.04 ± 0.008	0.02 ± 0.004	0.01 ± 0.001	0.00 ± 0.000	0.01 ± 0.003	0.01 ± 0.003

Values are the average of duplicates (± s.d.)

Table S4. Macromolecular features of isolated HG domains.

	Mw (kDa)	PDI	IV (dL/g)
MN			
Orange	22.98 ± 2.09	1.35 ± 0.06	0.93 ± 0.09
Lemon	23.13 ± 0.65	1.36 ± 0.01	0.93 ± 0.02
Lime	26.51 ± 0.14	1.34 ± 0.04	1.10 ± 0.00
Grapefruit	22.00 ± 0.21	1.35 ± 0.00	0.87 ± 0.00
HN			
Orange	23.86 ± 1.95	1.63 ± 0.04	1.03 ± 0.08
Lemon	20.06 + 1.07	1.53 ± 0.01	0.87 ± 0.06
Lime	17.07 ± 0.03	1.40 ± 0.00	0.70 ± 0.00
Grapefruit	24.13 ±1.16	1.63 ± 0.03	1.05 ± 0.05
MO			
Orange	29.88 ± 1.85	1.45 ± 0.03	1.02 ± 0.01
Lemon	37.67 ± 4.09	1.52 ± 0.10	1.16 ± 0.02
Lime	32.81 ± 0.39	1.52 ± 0.04	1.16 ± 0.08
Grapefruit	30.10 ± 1.33	1.46 ± 0.01	1.07 ± 0.06
HO			
Orange	24.35 ± 4.94	1.64 ± 0.15	1.10 ± 0.26
Lemon	19.50 ± 1.45	1.44 ± 0.08	0.83 ± 0.06
Lime	21.23 ± 0.81	1.55 ± 0.04	0.94 ± 0.03
Grapefruit	23.12 ± 1.16	1.60 ± 0.08	0.98 ± 0.05

M_w, weight-average molecular weight

PDI, polydispersity index (M_w/M_n); M_n, number-average molecular weight

IV, Intrinsic viscosity

Values are the average of two replicates (± s.d.).

Table S5. Amount of Ca^{2+} present in the different citrus peels (mg g^{-1}) and molar ratio between the amount of oxalic acid and the quantity of Ca^{2+} in harsh oxalic acid (HO) and mild oxalic acid (MO) extractions.

		OxA/Ca^{2+} molar ratio	
Peel	mg Ca^{2+}/g peel	HO	MO
Lime	12.31	1.03	2.62
Grapefruit	11.84	1.07	2.73
Lemon	7.52	1.27	4.29
Orange	6.37	1.50	5.07