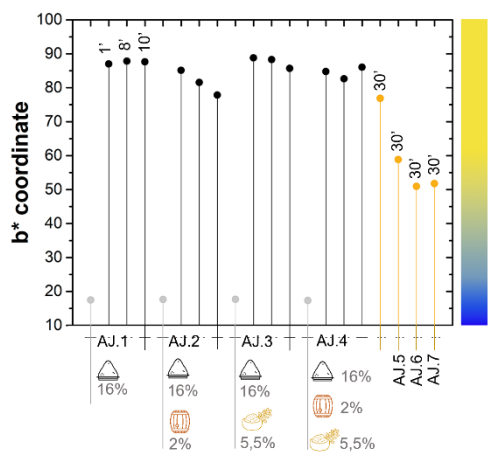
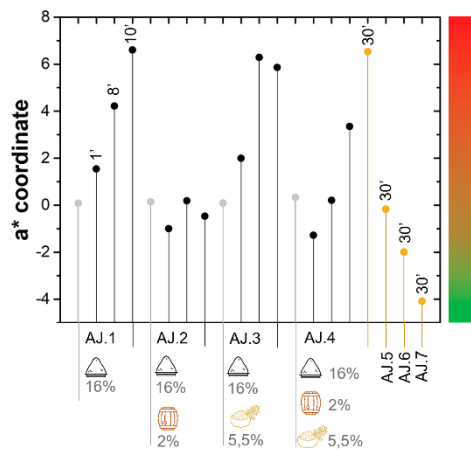
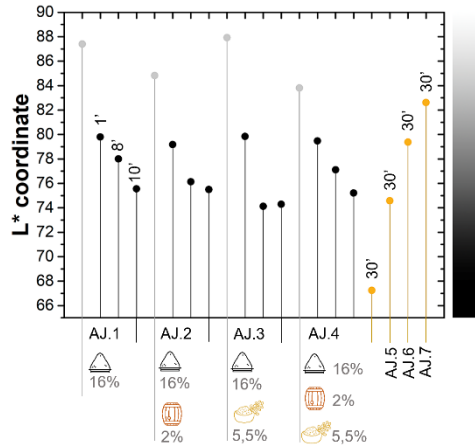


Supplementary Material

ANTOINE JANOT



PAUL GOUT

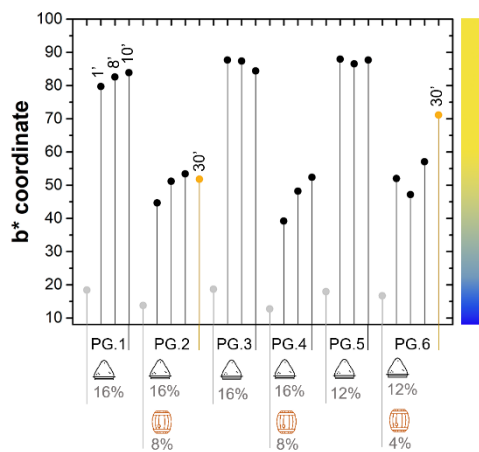
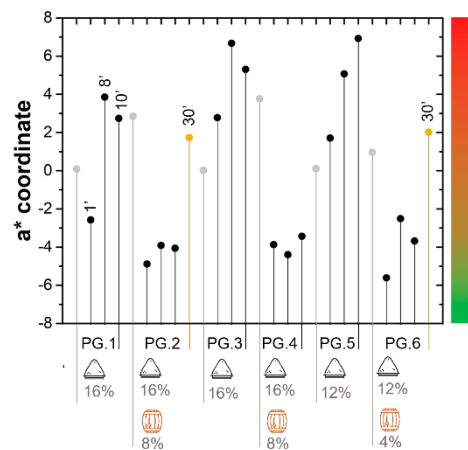
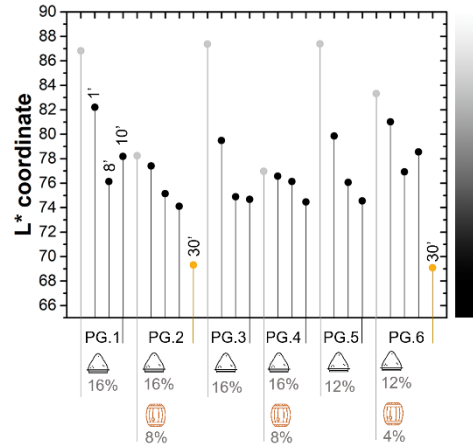


Figure S1. Colourimetry analysis for every recipe variation for both dye masters. In grey are the undyed mordanted cloths; in yellow are the final versions for each recipe, according to Table 2. Per variation, the dyeing times tested were 1, 8 and 10 minutes. The final version, 30 minutes in the dyeing bath, also has the addition of lime.

Table S1. Colourimetry data for Antoine Janot samples with the average and the percentage for standard deviation. In grey are the undyed samples, in yellow are the final versions.

Recipe variation	Sample		L*	a*	b*
AJ.1	Undyed	Average %ST D	87,41 0,25	0,08 91,65	17,49 1,43
	1 min	Average %ST D	79,80 0,26	1,54 52,34	87,04 1,49
	8 min	Average %ST D	77,98 0,80	4,22 13,40	87,82 0,45
	10 min	Average %ST D	75,55 0,26	6,58 5,25	87,65 1,14
AJ.2	Undyed	Average %ST D	84,83 0,31	0,14 48,72	17,65 2,07
	1 min	Average %ST D	79,17 0,04	-1,00 70,36	85,13 1,87
	8 min	Average %ST D	76,14 0,50	0,19 744,76	81,57 3,73
	10 min	Average %ST D	75,51 0,31	-0,47 116,24	77,83 1,14
AJ.3	Undyed	Average %ST D	87,93 0,11	0,09 107,21	17,66 4,03
	1 min	Average %ST D	79,84 0,44	2,00 8,72	88,82 0,51
	8 min	Average %ST D	74,13 0,95	6,29 10,50	88,29 0,91
	10 min	Average %ST D	74,29 2,56	5,86 31,68	85,71 0,90
AJ.4	Undyed	Average %ST D	83,81 0,76	0,33 1,73	17,33 3,55
	1 min	Average %ST D	79,48 0,65	-1,28 131,22	84,78 3,82
	8 min	Average %ST D	77,12 0,77	0,21 299,28	82,62 1,17
	10 min	Average %ST D	75,22 0,64	3,35 12,26	86,04 1,25
	30 min lime	Average %ST D	67,25 0,28	6,53 7,67	76,91 0,95
AJ.5	30 min lime	Average %ST D	74,58 1,02	-0,16 165,68	58,84 1,93
AJ.6	30 min lime	Average %ST D	79,38 1,04	-1,99 15,06	50,93 0,81
AJ.7	30 min lime	Average %ST D	82,62 1,22	-4,09 7,84	51,75 1,95

Table S2. Colourimetry data for Paul Gout samples with the average and the percentage for standard deviation. In grey are the undyed samples, in yellow are the final versions.

Recipe variation	Sample		L*	a*	b*
PG.1	Undyed	Average %ST D	86,83 0,38	0,09 57,74	18,39 1,46
	1 min	Average %ST D	82,21 0,63	-2,58 23,41	79,71 0,96
	8 min	Average %ST D	76,13 1,38	3,85 15,19	82,59 1,53
	10 min	Average %ST D	78,19 4,06	2,74 136,84	83,86 4,08
PG.2	Undyed	Average %ST D	78,25 0,76	2,85 0,88	13,77 3,06
	1 min	Average %ST D	77,41 0,74	-4,89 7,89	44,66 4,58
	8 min	Average %ST D	75,15 0,29	-3,92 4,25	51,17 0,58
	10 min	Average %ST D	74,11 1,77	-4,06 2,43	53,38 4,34
	30 min lime	Average %ST D	69,31 0,38	1,73 10,84	51,78 4,00
PG.3	Undyed	Average %ST D	87,37 0,39	0,01 241,09	18,66 1,33
	1 min	Average %ST D	79,49 0,54	2,78 21,23	87,65 1,10
	8 min	Average %ST D	74,89 1,02	6,67 7,54	87,35 0,53
	10 min	Average %ST D	74,67 0,07	5,30 7,20	84,39 0,91
PG.4	Undyed	Average %ST D	76,97 1,20	3,76 7,71	12,74 3,77
	1 min	Average %ST D	76,58 3,08	-3,87 5,58	39,18 1,70
	8 min	Average %ST D	76,13 0,44	-4,40 2,98	48,21 5,89
	10 min	Average %ST D	74,47 0,44	-3,44 4,39	52,38 5,81
PG.5	Undyed	Average %ST D	87,38 0,03	0,10 47,74	17,91 0,61
	1 min	Average %ST D	79,86 0,33	1,71 17,67	87,91 1,09
	8 min	Average %ST D	76,07 0,67	5,07 14,59	86,55 1,09
	10 min	Average %ST D	74,55 1,20	6,92 15,70	87,65 1,00
PG.6	Undyed	Average %ST D	83,32 0,05	0,96 5,76	16,71 0,34
	1 min	Average %ST D	81,01 0,54	-5,61 3,39	51,99 5,87

	8 min	Average	76,93	-2,51	47,16
		%ST D	2,05	35,09	15,79
	10 min	Average	78,56	-3,68	57,05
		%ST D	0,50	3,62	5,78
	30 min lime	Average	69,09	2,02	71,10
		%ST D	2,24	65,74	4,54

Table S3. Concentration of all chromophores extracted from all samples prepared following Antoine Janot's recipes, expressed in M of equivalents of Luteolin-7-O-glucoside (glucoside forms) or Luteolin (aglycone forms). Same superscripts within each column (a-k) indicate not significant differences ($P > 0.05$).

Sample	Api-6,8-C-glc	Lut-di-glc	Lut-3',7-di-O-glc	Lut-7-O-glc	Api-7-O-glc	Chry-O-gly
AJ.1	$8.01 \times 10^{-6} \text{ a,b,c,d} \pm 2 \times 10^{-8}$	$9.78 \times 10^{-6} \text{ a,b} \pm 4 \times 10^{-8}$	$1.80 \times 10^{-5} \text{ a,b} \pm 3 \times 10^{-7}$	$1.42 \times 10^{-4} \text{ a,b,c} \pm 1 \times 10^{-6}$	$1.9 \times 10^{-5} \text{ a,b,c} \pm 1 \times 10^{-6}$	$2.71 \times 10^{-5} \text{ a,b} \pm 6 \times 10^{-7}$
AJ.2	$7.8 \times 10^{-6} \pm 2 \times 10^{-7}$	$8.7 \times 10^{-6} \text{ c,d} \pm 2 \times 10^{-7}$	$1.47 \times 10^{-5} \text{ a,c} \pm 3 \times 10^{-7}$	$1.24 \times 10^{-4} \text{ a,d,e} \pm 2 \times 10^{-6}$	$1.6 \times 10^{-5} \text{ d,e} \pm 1 \times 10^{-6}$	$2.5 \times 10^{-5} \text{ c,d,e} \pm 2 \times 10^{-6}$
AJ.3	$7.96 \times 10^{-6} \text{ h,i} \pm 2 \times 10^{-8}$	$9.0 \times 10^{-6} \text{ a,e,f} \pm 1 \times 10^{-7}$	$1.65 \times 10^{-5} \text{ d} \pm 3 \times 10^{-7}$	$1.53 \times 10^{-4} \text{ d,f} \pm 3 \times 10^{-6}$	$1.80 \times 10^{-5} \text{ d,f} \pm 8 \times 10^{-7}$	$2.27 \times 10^{-5} \text{ a,f} \pm 4 \times 10^{-7}$
AJ.4	$7.89 \times 10^{-6} \text{ e,f,g} \pm 5 \times 10^{-8}$	$9.77 \times 10^{-6} \text{ c,g,h} \pm 5 \times 10^{-8}$	$1.83 \times 10^{-5} \text{ c,e} \pm 1 \times 10^{-7}$	$1.30 \times 10^{-4} \text{ d,g,h} \pm 4 \times 10^{-6}$	$1.9 \times 10^{-5} \text{ g} \pm 2 \times 10^{-6}$	$2.6 \times 10^{-5} \text{ g,h} \pm 2 \times 10^{-6}$
AJ.4 Jaune	$7.27 \times 10^{-6} \text{ a,e,h} \pm 1 \times 10^{-8}$	$7.4 \times 10^{-6} \text{ a,g,i} \pm 1 \times 10^{-7}$	$9.26 \times 10^{-6} \text{ a,c,d,e} \pm 2 \times 10^{-8}$	$5.13 \times 10^{-5} \text{ a,b,d,g,h} \pm 2 \times 10^{-7}$	$9.7 \times 10^{-6} \text{ a,d} \pm 2 \times 10^{-7}$	$9.4 \times 10^{-6} \text{ a,c,g} \pm 4 \times 10^{-7}$
AJ.5 Citron	$7.470 \times 10^{-6} \text{ b,f,h} \pm 6 \times 10^{-9}$	$7.78 \times 10^{-6} \text{ e,h} \pm 2 \times 10^{-8}$	$1.06 \times 10^{-5} \text{ b,c,d,e} \pm 2 \times 10^{-7}$	$4.701 \times 10^{-5} \text{ b,d,g,h} \pm 5 \times 10^{-8}$	$1.104 \times 10^{-5} \text{ b,f} \pm 9 \times 10^{-8}$	$1.164 \times 10^{-5} \text{ b,d,f,h} \pm 3 \times 10^{-8}$
AJ.6 Soufré	$7.730 \times 10^{-6} \text{ c,i} \pm 2 \times 10^{-9}$	$8.00 \times 10^{-6} \text{ b,d,f,i} \pm 8 \times 10^{-8}$	$1.17 \times 10^{-5} \text{ b,c,d,e} \pm 2 \times 10^{-7}$	$4.55 \times 10^{-5} \text{ c,e,f,h} \pm 3 \times 10^{-7}$	$1.190 \times 10^{-5} \text{ a,b,c,f} \pm 10 \times 10^{-8}$	$1.225 \times 10^{-5} \text{ a,b,c,e,f,g,h} \pm 6 \times 10^{-8}$
AJ.7 Paille	$7.50 \times 10^{-6} \text{ d,g,i} \pm 7 \times 10^{-8}$	$7.6 \times 10^{-6} \text{ b,d,f,i} \pm 1 \times 10^{-7}$	$9.76 \times 10^{-6} \text{ b,c,d,e} \pm 7 \times 10^{-8}$	$2.77 \times 10^{-5} \text{ c,d,e,f,h} \pm 3 \times 10^{-7}$	$9.47 \times 10^{-6} \text{ b,c,e,f,g} \pm 3 \times 10^{-8}$	$9.2 \times 10^{-6} \text{ a,b,e,f,h} \pm 1 \times 10^{-7}$

Sample	Lut-4'-O-glc	Lut	Api
AJ.1	$2.53 \times 10^{-5} \text{ a,c,d,e} \pm 2 \times 10^{-7}$	$4.14 \times 10^{-4} \text{ a} \pm 2 \times 10^{-6}$	$4.0 \times 10^{-5} \text{ a,b,c} \pm 2 \times 10^{-6}$
AJ.2	$2.73 \times 10^{-5} \text{ b,f,g} \pm 9 \times 10^{-7}$	$6.168 \times 10^{-4} \text{ a,b} \pm 6 \times 10^{-7}$	$5.1 \times 10^{-5} \text{ d,e,f} \pm 3 \times 10^{-6}$
AJ.3	$1.9 \times 10^{-5} \text{ a,b,h} \pm 1 \times 10^{-6}$	$2.24 \times 10^{-4} \text{ a,b} \pm 1 \times 10^{-6}$	$2.32 \times 10^{-5} \text{ a,d,e,f,g} \pm 6 \times 10^{-7}$
AJ.4	$2.5 \times 10^{-5} \text{ l,j} \pm 2 \times 10^{-6}$	$4.0 \times 10^{-4} \text{ b} \pm 1 \times 10^{-5}$	$4.0 \times 10^{-5} \text{ a,g,h,i} \pm 2 \times 10^{-6}$
AJ.4 Jaune	$1.089 \times 10^{-5} \text{ a,b,c,l,k} \pm 1 \times 10^{-8}$	$1.09 \times 10^{-4} \text{ a,b} \pm 1 \times 10^{-6}$	$1.46 \times 10^{-5} \text{ a,c,d,g} \pm 4 \times 10^{-7}$
AJ.5 Citron	$7.4 \times 10^{-6} \text{ c,d,f,i} \pm 2 \times 10^{-7}$	$7.37 \times 10^{-5} \text{ a,b} \pm 2 \times 10^{-7}$	$1.62 \times 10^{-5} \text{ b,e,h} \pm 5 \times 10^{-7}$
AJ.6 Soufré	$4.87 \times 10^{-5} \text{ e,g,k} \pm 1 \times 10^{-7}$	$4.87 \times 10^{-5} \text{ a,b} \pm 1 \times 10^{-7}$	$1.37 \times 10^{-5} \text{ f,i} \pm 4 \times 10^{-7}$
AJ.7 Paille	$2.1 \times 10^{-6} \text{ d,e,f,g,h,j} \pm 1 \times 10^{-7}$	$2.12 \times 10^{-5} \text{ a,b} \pm 1 \times 10^{-7}$	$9.7 \times 10^{-6} \text{ b,c,g,h,i} \pm 1 \times 10^{-7}$

Api-6,8-C-glc: Apigenin-6,8-C-glucoside; Lut-di-glc: Luteolin-di-glucoside; Lut-3',7-di-O-glc: Luteolin-3',7-di-O-glucoside; Lut-7-O-glc: Luteolin-7-O-glucoside; Api-7-O-glc: Apigenin-7-O-glucoside; Chry-O-gly: Chrysoeriol-O-glycoside; Lut-4'-O-glc: Luteolin-4'-O-glucoside; Lut: Luteolin; Api: Apigenin

Table S4. Concentration of all chromophores extracted from all samples prepared following Paul Gout's recipes, expressed in M of equivalents of Luteolin-7-O-glucoside (glucoside forms) or Luteolin (aglycone forms). Same superscripts within each column (a-j) indicate not significant differences ($P > 0.05$).

Sample	Api-6,8-C-glc	Lut-di-glc	Lut-3',7-di-O-glc	Lut-7-O-glc	Api-7-O-glc	Chry-O-gly
PG.1	$7.72 \times 10^{-6} \text{ a,b} \pm 4 \times 10^{-8}$	$8.43 \times 10^{-6} \text{ a,b,c,d,e} \pm 4 \times 10^{-8}$	$1.26 \times 10^{-5} \text{ a,b} \pm 7 \times 10^{-7}$	$7.8 \times 10^{-5} \text{ a,b} \pm 3 \times 10^{-6}$	$1.13 \times 10^{-5} \text{ a} \pm 10 \times 10^{-7}$	$1.39 \times 10^{-5} \text{ a,b,c} \pm 9 \times 10^{-7}$
PG.2	$7.604 \times 10^{-6} \text{ c,d,e,f} \pm 3 \times 10^{-9}$	$8.0 \times 10^{-6} \text{ f} \pm 1 \times 10^{-7}$	$1.15 \times 10^{-5} \text{ c} \pm 4 \times 10^{-7}$	$6.14 \times 10^{-5} \text{ c,d,e,f} \pm 2 \times 10^{-7}$	$1.17 \times 10^{-5} \text{ b} \pm 5 \times 10^{-7}$	$1.55 \times 10^{-5} \text{ d,e,f} \pm 3 \times 10^{-7}$
PG.2 Jaune	$7.42 \times 10^{-6} \text{ a,d,g} \pm 1 \times 10^{-8}$	$7.76 \times 10^{-6} \text{ a,g} \pm 1 \times 10^{-8}$	$8.90 \times 10^{-6} \text{ a,d,e} \pm 9 \times 10^{-8}$	$2.62 \times 10^{-5} \text{ a,c,g} \pm 3 \times 10^{-7}$	$9.384 \times 10^{-5} \text{ c,d} \pm 4 \times 10^{-8}$	$9.0 \times 10^{-6} \text{ a,d,g} \pm 3 \times 10^{-7}$
PG.3 Limon	$7.44 \times 10^{-6} \text{ e,h} \pm 2 \times 10^{-8}$	$7.75 \times 10^{-6} \text{ b} \pm 2 \times 10^{-8}$	$9.0 \times 10^{-6} \text{ f} \pm 9 \times 10^{-7}$	$2.077 \times 10^{-5} \text{ a,b,c,h} \pm 4 \times 10^{-7}$	$9.08 \times 10^{-5} \text{ e,f,g} \pm 2 \times 10^{-7}$	$9.3 \times 10^{-6} \text{ b,e,h} \pm 3 \times 10^{-7}$
PG.4	$7.41 \times 10^{-6} \text{ b,c} \pm 1 \times 10^{-8}$	$7.96 \times 10^{-6} \text{ c} \pm 9 \times 10^{-8}$	$1.16 \times 10^{-5} \text{ d,g} \pm 4 \times 10^{-7}$	$7.95 \times 10^{-5} \text{ e,g,h} \pm 8 \times 10^{-7}$	$1.30 \times 10^{-5} \text{ c,e,h} \pm 5 \times 10^{-7}$	$1.68 \times 10^{-5} \text{ g,h,i,j} \pm 6 \times 10^{-7}$
PG.5	$7.31 \times 10^{-6} \text{ b,f} \pm 2 \times 10^{-8}$	$7.63 \times 10^{-6} \text{ d} \pm 2 \times 10^{-8}$	$1.08 \times 10^{-5} \text{ h} \pm 7 \times 10^{-7}$	$9.1 \times 10^{-5} \text{ d,f,g,h} \pm 1 \times 10^{-6}$	$1.096 \times 10^{-5} \text{ d,f} \pm 1 \times 10^{-8}$	$1.11 \times 10^{-5} \text{ c,f,i} \pm 6 \times 10^{-7}$
PG.6	$8.22 \times 10^{-6} \text{ c,d,e,f} \pm 1 \times 10^{-7}$	$9.51 \times 10^{-6} \text{ b,c,d,e,f,g} \pm 8 \times 10^{-8}$	$1.97 \times 10^{-5} \text{ b,c,e,f,g,h} \pm 3 \times 10^{-7}$	$1.591 \times 10^{-4} \text{ b,d,f,g,h} \pm 4 \times 10^{-7}$	$2.0 \times 10^{-6} \text{ a,b,d,g} \pm 1 \times 10^{-6}$	$2.5 \times 10^{-5} \text{ c,f,g,h,i,j} \pm 1 \times 10^{-6}$
PG.6 Jaune	$7.62 \times 10^{-6} \text{ g,h} \pm 3 \times 10^{-8}$	$8.00 \times 10^{-6} \text{ d,e,g} \pm 5 \times 10^{-8}$	$9.9 \times 10^{-6} \text{ b,e,g} \pm 2 \times 10^{-7}$	$5.4 \times 10^{-5} \text{ d,f,g,h} \pm 1 \times 10^{-6}$	$1.01 \times 10^{-5} \text{ h} \pm 4 \times 10^{-7}$	$1.18 \times 10^{-5} \text{ j} \pm 7 \times 10^{-7}$

Sample	Lut-4'-O-glc	Lut	Api
PG.1	$1.39 \times 10^{-5} \text{ a} \pm 9 \times 10^{-7}$	$1.858 \times 10^{-4} \text{ a,b} \pm 3 \times 10^{-7}$	$1.9 \times 10^{-5} \text{ a,b} \pm 2 \times 10^{-6}$
PG.2	$1.55 \times 10^{-5} \text{ b,c} \pm 3 \times 10^{-7}$	$2.28 \times 10^{-4} \text{ a,b} \pm 2 \times 10^{-6}$	$2.6 \times 10^{-5} \text{ c} \pm 1 \times 10^{-6}$
PG.2 Jaune	$9.0 \times 10^{-6} \text{ b,d,e} \pm 2 \times 10^{-7}$	$7.193 \times 10^{-4} \text{ a} \pm 4 \times 10^{-7}$	$1.53 \times 10^{-5} \text{ c,d,e,f,g} \pm 2 \times 10^{-7}$
PG.3 Limon	$8.89 \times 10^{-6} \text{ a,c,f,g} \pm 8 \times 10^{-8}$	$4.076 \times 10^{-4} \text{ a,b} \pm 10 \times 10^{-7}$	$1.33 \times 10^{-5} \text{ c,d,e,f,g} \pm 2 \times 10^{-7}$
PG.4	$1.763 \times 10^{-5} \text{ b,f,h} \pm 5 \times 10^{-8}$	$2.336 \times 10^{-4} \text{ b} \pm 4 \times 10^{-7}$	$2.57 \times 10^{-5} \text{ a,d} \pm 8 \times 10^{-7}$
PG.5	$1.30 \times 10^{-5} \text{ d,f} \pm 5 \times 10^{-7}$	$3.571 \times 10^{-4} \text{ a,b} \pm 4 \times 10^{-7}$	$2.6 \times 10^{-5} \text{ e} \pm 1 \times 10^{-6}$
PG.6	$2.12 \times 10^{-5} \text{ d,g} \pm 1 \times 10^{-6}$	$2.66 \times 10^{-4} \text{ a,b} \pm 2 \times 10^{-6}$	$3.0 \times 10^{-5} \text{ b,f} \pm 1 \times 10^{-6}$
PG.6 Jaune	$1.45 \times 10^{-5} \text{ e,g,h} \pm 3 \times 10^{-7}$	$3.333 \times 10^{-4} \text{ a,b} \pm 2 \times 10^{-7}$	$2.56 \times 10^{-5} \text{ g} \pm 2 \times 10^{-7}$

Api-6,8-C-glc: Apigenin-6,8-C-glucoside; Lut-di-glc: Luteolin-di-glucoside; Lut-3',7-di-O-glc: Luteolin-3',7-di-O-glucoside; Lut-7-O-glc: Luteolin-7-O-glucoside; Api-7-O-glc: Apigenin-7-O-glucoside; Chry-O-gly: Chrysoeriol-O-glycoside; Lut-4'-O-glc: Luteolin-4'-O-glucoside; Lut: Luteolin; Api: Apigenin.