Supplementary Materials

Table S1. Caffeine content (mean ± SE, in mg/g) and decrease (%) in coffees and teas during successive extractions with different solvents (W: water; M: methanol; W:M water:methanol mix). Different letters in the table indicate statistical significance (p≤0.05) in caffeine content between solvents.

	Caffeine content - First extraction (mg/g)			Caffeine content - Second extraction (mg/g)			Decrease (%)		
	W	M	W:M	W	M	W:M	W	M	W:M
Teas									
Green tea	16.62 ± 1.4 a	12.97 ± 0.4 b	16.02 ± 0.8 a	2.22 ± 0.6 a	2.40 ± 0.2 a	1.77 ± 0.2 a	86 ± 5	81 ± 2	89 ± 2
Black tea	26.80 ± 4.6 a	9.90 ± 0.9 b	30.94 ± 1.8 a	12.02 ± 4.1 a	3.20 ± 0.4 b	10.09 ± 1.6 a	54 ± 18	67 ± 6	67 ± 7
Mate tea	8.07 ± 2.3 a	6.17 ± 0.4 b	6.48 ± 0.5 b	1.85 ± 0.7 b	1.17 ± 0.5 b	3.82 ± 0.2 a	74 ± 18	81 ± 9	41 ± 4
Coffees									
Instant	34.82 ± 2.5 a	30.01 ± 2.3 b	23.06 ± 2.7 c	-	-	-	-	-	-
Ground	9.57 ± 2.7 a	8.04 ± 0.3 ab	6.99 ± 1.7 b	4.17 ± 1.0 a	3.33 ± 0.3 a	5.17 ± 1.0 a	50 ± 32	59 ± 4	20 ± 33
Intense	15.56 ± 1.8 a	7.17 ± 0.6 c	11.64 ± 2.4 b	3.59 ± 0.9 a	2.69 ± 0.4 a	4.86 ± 1.6 a	77 ± 8	63 ± 4	54 ± 29

Table S2. Phenolic compounds content (mean ± SE, in mg/kg) and decrease (%) in green tea during successive extractions with different solvents (W: water, M: methanol; W:M water:methanol mix). Different letters in the table indicate statistical significance (p≤0.05) in phenolic content between solvents.

	First extraction (mg/kg)			Second extraction (mg/kg)			DECREASE (%)		
	W	M	W:M	W	M	W:M	W	M	W:M
Flavanols									
Procyanidin dimer 1	1.39 ± 0.11 ab	1.04 ± 0.22 b	1.58 ± 0.09 a	0.72 ± 0.19 a	0.31 ± 0.12 ab	0.21 ± 0.08 b	48	70	87
Procyanidin dimer 2	13.39 ± 0.41 a	11.95 ± 0.22 b	12.51 ± 0.44 ab	10.39 ± 0.94 a	9.82 ± 0.76 a	8.86 ± 0.44 a	22	18	29
Procyanidin dimer 3	1.68 ± 0.19 a	1.25 ± 0.16 a	1.8 ± 0.06 a	0.43 ± 0.06 ab	0.23 ± 0.07 b	0.24 ± 0.05 a	74	82	87
Epigallocatechin 1	0.45 ± 0.03 b	0.42 ± 0.03 b	0.54 ± 0.02 a	0.14 ± 0.04 a	0.13 ± 0.02 a	0.08 ± 0.02 a	69	69	85
Epigallocatechin 2	1.17 ± 0.07 a	0.81 ± 0.13 b	1.42 ± 0.02 a	0.22 ± 0.05 a	0.17 ± 0.01 a	0.18 ± 0.02 a	81	79	87
Gallocatechin	0.26 ± 0.02 a	0.16 ± 0.04 b	0.32 ± 0.01 a	0.09 ± 0.02 a	0.08 ± 0.02 a	0.04 ± 0.01 a	65	50	88
Epigallocatechin gallate 1	0.94 ± 0.03 a	0.84 ± 0.01 b	0.88 ± 0.03 ab	0.73 ± 0.06 a	0.69 ± 0.05 a	0.62 ± 0.03 a	22	18	30
Epigallocatechin gallate 2	2.05 ± 0.35 a	1.68 ± 0.38 a	1.88 ± 0.03 a	0.37 ± 0.06 a	0.35 ± 0.05 a	0.23 ± 0.02 a	82	79	88
Epigallocatechin gallate 3	4.8 ± 2.16 b	11.46 ± 2.04 a	2.18 ± 0.06 b	2.19 ± 0.22 a	1.46 ± 0.3 ab	0.76 ± 0.04 b	54	87	65
Epigallocatechin gallate 4	0.55 ± 0.03 a	0.57 ± 0.03 a	0.64 ± 0.02 a	0.14 ± 0.01 a	0.11 ± 0.01 a	0.10 ± 0.01 a	75	81	84
Epicatechin gallate 1	0.004 ± 0.0005 c	0.02 ± 0.001 b	0.04 ± 0.005 a	traces	traces	traces			
Epicatechin gallate 2	traces	traces	traces	traces	traces	traces			

Epicatechin gallate 3	1.68 ± 0.12 a	1.78 ± 0.06 b	2.56 ± 0.09 b	0.46 ± 0.04 a	0.33 ± 0.01 b	0.34 ± 0.03 b	73	81	87
Theaflavine	1.12 ± 0.07 b	2.24 ± 0.034 b	2.01 ± 0.28 a	0.41 ± 0.05 a	0.28 ± 0.01 b	0.29 ± 0.02 b	63	88	86
Total flavanols	**29.48 ± 3.6 b**	**34.22 ± 3.4 a**	**28.36 ± 1.2 b**	**16.29 ± 1.8 a**	**13.96 ± 1.5 b**	**11.95 ± 0.8 c**	**45**	**59**	**58**
Flavonols									
Myricetin hexoside 1	0.07 ± 0.006 b	0.08 ± 0.003 b	0.11 ± 0.009 a	0.03 ± 0.003 a	0.16 ± 0.0004 b	0.02 ± 0.001 b	57	-100	82
Myricetin hexoside 2	0.08 ± 0.05 b	0.68 ± 0.02 c	1.12 ± 0.04 a	0.23 ± 0.02 a	0.16 ± 0.004 b	0.18 ± 0.011 b	-188	76	84
Quercetin hexososide rhamnoside hexoside	0.87 ± 0.06 a	0.62 ± 0.002 b	1.19 ± 0.03 b	0.19 ± 0.02 ab	0.15 ± 0.16 b	0.19 ± 0.24 a	78	76	84
Quercetin rhamnoside hexoside	0.22 ± 0.01 b	0.19 ± 0.01 b	0.34 ± 0.04 a	0.06 ± 0.017 a	0.05 ± 0.001 ab	0.05 ± 0.003 b	73	74	85
Quercetin-3-rutinoside	1.92 ± 0.13 b	1.59 ± 0.04 c	2.5 ± 0.08 a	0.57 ± 0.04 b	0.39 ± 0.01 c	0.45 ± 0.03 a	70	75	82
Quercetin-3-galactoside	0.19 ± 0.03 b	0.23 ± 0.02 b	0.28 ± 0.04 a	0.08 ± 0.007 a	0.06 ± 0.06 b	0.05 ± 0.01 b	58	74	82
Quercetin-3-glucoside	0.04 ± 0.003 a	0.03 ± 0.004 a	0.04 ± 0.005 a	0.02 ± 0.004 a	0.007 ± 0.002 b	0.007 ± 0.001 b	50	77	83
Kempferol-3-rutinoside	0.14 ± 0.01 b	0.14 ± 0.004 b	0.20 ± 0.01 a	0.05 ± 0.005 a	0.04 ± 0.042 b	0.03 ± 0.042 b	64	71	85
Total flavonols	**3.53 ± 0.3 b**	**3.56 ± 0.1 b**	**5.78 ± 0.3 a**	**1.23 ± 0.1 a**	**1.02 ± 0.3 b**	**0.98 ± 0.3 b**	**65**	**71**	**83**
Phenolic acids									
3-*p*-coumaroylquinic acid	0.04 ± 0.002 b	0.04 ± 0.002 b	0.05 ± 0.001 a	0.002 ± 0.0005 a	0.004 ± 0.0005 ab	0.003 ± 0.0005 b	95	90	94
3-caffeoylquinic acid	0.009 ± 0.008 b	0.07 ± 0.01 b	0.14 ± 0.003 a	0.02 ± 0.004 a	0.01 ± 0.002 a	0.01 ± 0.0009 a	-122	86	93
4-caffeoylquinic acid	0.05 ± 0.002 a	0.05 ± 0.004 a	0.05 ± 0.001 a	0.01 ± 0.002 a	0.006 ± 0.0008 a	0.005 ± 0.0003 a	80	88	90
5-caffeoylquinic acid	0.05 ± 0.006 b	0.04 ± 0.006 b	0.07 ± 0.002 a	0.02 ± 0.007 a	0.005 ± 0.001 a	0.008 ± 0.0006 a	60	88	89
5-*O*-galloylquinic acid	2.11 ± 0.26 a	1.08 ± 0.26 b	2.28 ± 0.05 a	1.28 ± 0.43 a	0.33 ± 0.08 b	0.28 ± 0.02 b	39	69	88
Gallic acid	0.22 ± 0.03 a	0.12 ± 0.03 b	0.24 ± 0.005 a	0.14 ± 0.05 a	0.03 ± 0.008 b	0.03 ± 0.003 b	36	75	88
Total phenolic acids	**2.48 ± 0.3 a**	**1.40 ± 0.3 b**	**2.83 ± 0.1 a**	**1.47 ± 0.5 a**	**0.39 ± 0.1 b**	**0.34 ± 0.1 b**	**41**	**72**	**88**

Table S3. Phenolic compounds content (mean ± SE, in mg/kg) and decrease (%) in black tea during successive extractions with different solvents (W: water, M: methanol; W:M water:methanol mix). Different letters in the table indicate statistical significance ($p \leq 0.05$) in phenolic content between solvents.

	First extraction (mg/kg)			**Second extraction (mg/kg)**			**DECREASE (%)**		
	W	**M**	**W:M**	**W**	**M**	**W:M**	**W**	**M**	**W:M**
Flavanols									
Epicatechin	4.08 ± 0.29 a	0.60 ± 0.02 b	4.17 ± 0.13 a	0.85 ± 0.29 a	0.16 ± 0.02 b	0.94 ± 0.10 a	79	73	77

Catechin	0.35 ± 0.34 b	0.05 ± 0.006 b	0.33 ± 0.008 a	0.06 ± 0.01 a	0.01 ± 0.001 b	0.05 ± 0.008 a	83	80	85
Epigallocatechin 1	0.42 ± 0.05 b	0.14 ± 0.02 c	0.49 ± 0.01 a	0.07 ± 0.02 a	0.04 ± 0.02 a	0.09 ± 0.005 a	83	71	82
Gallocatechin	1.33 ± 0.12 a	0.37 ± 0.01 b	1.17 ± 0.03 a	0.32 ± 0.32 a	0.12 ± 0.19 b	0.46 ± 0.46 a	76	68	61
Epigallocatechin gallate	2.88 ± 0.14 a	0.59 ± 0.04 b	2.84 ± 0.05 a	0.39 ± 0.11 a	0.16 ± 0.02 b	0.32 ± 0.04 ab	86	73	89
Epicatechin gallate 1	0.89 ± 0.08 b	0.16 ± 0.02 c	1.13 ± 0.47 a	0.20 ± 0.07 a	0.03 ± 0.002 b	0.17 ± 0.03 a	78	81	85
Epicatechin gallate 2	traces	traces	traces	traces	traces	traces			
Gallocatechin gallate	0.59 ± 0.04 b	0.26 ± 0.01 b	0.58 ± 0.03 a	0.13 ± 0.04 a	0.09 ± 0.01 a	0.12 ± 0.01 a	78	65	79
Theaflavine	1.11 ± 0.93 a	0.57 ± 0.23 b	1.34 ± 0.02 a	0.51 ± 0.83 b	0.11 ± 0.15 b	0.17 ± 0.38 b	54	81	87
Theaflavine-3,3′-digallate	0.84 ± 0.06 b	0.68 ± 0.05 b	1.38 ± 0.61 a	0.31 ± 0.09 a	0.13 ± 0.01 a	0.13 ± 0.06 a	63	81	91
Theaflavine-3-gallate	0.77 ± 0.06 b	0.53 ± 0.03 c	1.18 ± 0.05 a	0.37 ± 0.06 a	0.09 ± 0.008 b	0.15 ± 0.04 b	52	83	87
Total flavanols	**13.26 ± 2.1 b**	**3.95 ± 0.4 c**	**14.61 ± 1.4 a**	**3.21 ± 1.8 a**	**0.94 ± 0.4 c**	**2.60 ± 1.1 ab**	**76**	**76**	**82**
Flavonols									
Myricetin hexoside 1	0.22 ± 0.02 b	0.05 ± 0.005 c	0.28 ± 0.01 a	0.08 ± 0.008 a	0.011 ± 0.0009 b	0.07 ± 0.008 a	64	78	75
Myricetin hexoside 2	0.33 ± 0.07 b	0.091 ± 0.014 c	0.42 ± 0.03 a	0.11 ± 0.02 a	0.022 ± 0.001 b	0.12 ± 0.01 a	67	76	71
Quercetin rhamnosil hexoside dirhamnoside	0.11 ± 0.03 b	0.11 ± 0.007 c	0.49 ± 0.008 a	0.13 ± 0.02 a	0.02 ± 0.001 b	0.11 ± 0.17 a	-18	82	78
Quercetin rhamnoside hexoside	traces	traces	traces	traces	traces	traces			
Quercetin-3-rutinoside	2.03 ± 0.15 b	0.52 ± 0.02 c	2.39 ± 0.51 a	0.47 ± 0.06 a	0.11 ± 0.006 b	0.41 ± 0.04 a	77	79	83
Quercetin-3-galactoside	0.87 ± 0.06 b	0.29 ± 0.001 c	1.14 ± 0.03 a	0.33 ± 0.04 a	0.08 ± 0.08 b	0.29 ± 0.38 a	62	72	75
Quercetin-3-glucoside	1.53 ± 0.11 b	0.53 ± 0.014 c	1.94 ± 0.05 a	0.25 ± 0.11 a	0.15 ± 0.006 b	0.49 ± 0.04 a	84	72	75
Kaempferol-3-rutinoside	0.72 ± 0.05 b	0.19 ± 0.008 c	0.87 ± 0.02 a	0.2 ± 0.02 a	0.04 ± 0.002 b	0.18 ± 0.018 a	72	79	79
Kaempferol-3-galactoside	0.45 ± 0.03 a	0.16 ± 0.07 b	0.68 ± 0.01 a	0.18 ± 0.02 a	0.04 ± 0.046 b	0.16 ± 0.02 a	60	75	76
Kaempferol-3-glucoside	0.95 ± 0.07 b	0.37 ± 0.04 c	1.31 ± 0.08 a	0.37 ± 0.05	0.10 ± 0.003 b	0.32 ± 0.03 a	61	73	76
Kaempferol hexoside rhamnoside	0.02 ± 0.002 b	0.006 ± 0.0005 c	0.04 ± 0.0009 a	0.008 ± 0.001 a	0.001 ± 0.0001 b	0.006 ± 0.0008 a	60	83	85
Kaempferol hexoside trirhamnoside	0.15 ± 0.02 b	0.56 ± 0.005 c	0.24 ± 0.02 a	0.06 ± 0.01 a	0.01 ± 0.001 b	0.06 ± 0.008 a	60	98	75
Kaempferol acetil hexoside	0.19 ± 0.02 b	0.06 ± 0.007 c	0.27 ± 0.008 a	0.07 ± 0.01	0.01 ± 0.001 b	0.06 ± 0.009 a	63	83	78
Total flavonols	**7.57 ± 0.6 b**	**2.94 ± 0.2 c**	**10.07 ± 0.8 a**	**2.26 ± 0.4 a**	**0.59 ± 0.1 b**	**2.28 ± 0.7 a**	**70**	**80**	**77**
Phenolic acids									
3-p-coumaroylquinic acid	0.39 ± 0.06 a	0.04 ± 0.002 c	0.33 ± 0.01 b	0.06 ± 0.008 a	0.02 ± 0.001 c	0.21 ± 0.01 a	85	50	36

4-coumaroylquinic acid	1.44 ± 0.09 a	0.29 ± 0.01 b	1.14 ± 0.22 a	0.15 ± 0.03 a	0.08 ± 0.004 b	0.15 ± 0.01 a	90	72	87
5-p-coumaroylquinic acid	0.09 ± 0.02 b	0.02 ± 0.002 c	0.30 ± 0.01 a	0.08 ± 0.01 a	0.004 ± 0.001 b	0.07 ± 0.01 a	11	80	77
3-caffeoylquinic acid 1	0.38 ± 0.03 a	0.53 ± 0.005 b	0.39 ± 0.009 a	0.09 ± 0.01 a	0.01 ± 0.0009 c	0.05 ± 0.006 b	76	98	87
3-caffeoylquinic acid 2	0.19 ± 0.01 a	0.02 ± 0.001 c	0.16 ± 0.01 b	0.03 ± 0.04 b	0.01 ± 0.0007 c	0.1 ± 0.007 a	84	50	38
4-caffeoylquinic acid	2.08 ± 0.11 a	0.44 ± 0.02 b	2 ± 0.05 a	0.30 ± 0.04 a	0.11 ± 0.008 b	0.22 ± 0.027 a	86	75	89
5-caffeoylquinic acid 1	0.58 ± 0.04 a	0.09 ± 0.01 b	0.59 ± 0.01 a	0.11 ± 0.002 a	0.11 ± 0.002 a	0.09 ± 0.01 a	81	-22	85
5-caffeoylquinic acid 2	0.03 ± 0.002 b	0.005 ± 0.001 c	0.05 ± 0.002 a	0.01 ± 0.002 a	0.007 ± 0.0002 c	0.008 ± 0.001 b	67	-40	84
Total phenolic acids	**5.18 ± 0.4 a**	**1.44 ± 0.1 b**	**4.96 ± 0.3 a**	**0.83 ± 0.1 a**	**0.35 ± 0.0 b**	**0.90 ± 0.1 a**	**84**	**76**	**82**

Table S4. Phenolic compounds content (mean ± SE, in mg/kg) and decrease (%) in mate tea during successive extractions with different solvents (W: water, M: methanol; W:M water:methanol mix). Different letters in the table indicate statistical significance ($p \leq 0.05$) in phenolic content between solvents.

	First extraction (mg/kg)			**Second extraction (mg/kg)**			**DECREASE (%)**		
	W	**M**	**W:M**	**W**	**M**	**W:M**	**W**	**M**	**W:M**
Flavonols									
Quercetin-3-rutinoside	4.92 ± 1.11 a	3.86 ± 0.19 a	4.20 ± 0.16 a	1.83 ± 0.11 b	0.77 ± 0.26 c	3.15 ± 0.32 a	63	80	25
Quercetin-3-glucoside	0.67 ± 0.04 a	0.43 ± 0.04 b	0.45 ± 0.02 b	0.17 ± 0.01 b	0.13 ± 0.05 b	0.32 ± 0.32 a	75	70	29
Kaempferol-3-rutinoside	1.10 ± 0.06 b	0.69 ± 0.04 b	0.73 ± 0.02 a	0.29 ± 0.01 a	0.14 ± 0.03 b	0.55 ± 0.03 b	74	80	25
Isorhamnetin-3-rutinoside	0.33 ± 0.02 b	0.19 ± 0.02 c	0.22 ± 0.00 9 a	0.83 ± 0.005 a	0.02 ± 0.02 b	0.17 ± 0.01 b	-152	89	23
Total flavonols	**7.02 ± 1.2 a**	**5.17 ± 0.3 b**	**5.60 ± 0.2 b**	**3.12 ± 0.1 b**	**1.06 ± 0.4 c**	**4.19 ± 0.7 a**	**56**	**79**	**25**
Phenolic acids									
3-p-coumaroylquinic acid	4.18 ± 0.53 a	1.11 ± 0.06 c	2.72 ± 0.07 b	0.81 ± 0.13 b	0.38 ± 0.02 c	1.53 ± 1.58 a	81	66	44
4-coumaroylquinic acid	0.09 ± 0.008 a	0.06 ±	0.04 ±	0.02 ± 0.002 b	0.05 ±	0.05 ±	78	17	-25

		0.009 b	0.003 b		0.015 a		
3-caffeoylquinic acid	19 ± 2.28 a	6.87 ± 0.33 c	13.26 ± 0.83 b	23.64 ± 2.28 a	7.56 ± 0.33 c	13.76 ± 0.34 b	-24 -10 -4
4-caffeoylquinic acid	3.75 ± 0.45 a	1.08 ± 0.14 c	2.5 ± 0.15 b	0.75 ± 0.13 b	0.37 ± 0.03 c	1.44 ± 0.01 a	80 66 42
5-caffeoylquinic acid 1	0.04 ± 0.005 a	0.010 ± 0.0006 c	0.03 ± 0.006 b	0.008 ± 0.001 b	0.004 4 ± 0.0003 c	0.01 ± 0.001 a	80 56 67
5-caffeoylquinic acid 2	0.005 ± 2.83 a	0.003 ± 4.16 b	0.004 ± 8.45 b	0.0009 ± 0.0002 a	0.003 ± 0.0007 b	0.002 ± 0.002 a	82 0 50
Dicaffeoylquinic acid 1	5.26 ± 0.23 d	1.49 ± 0.13 c	2.78 ± 0.07 b	1.48 ± 0.07 b	0.38 ± 0.08 c	1.80 ± 0.09 a	72 74 35
Dicaffeoylquinic acid 2	17.0 ± 2.14 a	9.17 ± 0.05 b	11.79 ± 0.3 0 b	6.20 ± 0.57 b	1.89 ± 0.29 c	7.63 ± 0.34 a	64 79 35
Dicaffeoylquinic acid 3	8.44 ± 1.06 a	3.75 ± 0.22 b	4.07 ± 1.25 b	3.86 ± 0.36 a	0.91 ± 0.14 b	3.95 ± 0.18 a	54 76 3
Dicaffeoylquinic acid 4	0.76 ± 0.06 a	0.410 ± 0.08 b	0.48 ± 0.03 b	0.21 ± 0.01 ab	0.130 ± 0.05 a	0.29 ± 0.03 b	72 68 40
3-feruloylquinic acid	0.15 ± 0.02 a	0.04 ± 0.0006 c	0.1 ± 0.006 b	0.03 ± 0.005 b	0.01 ± 0.001 c	0.06 ± 0.006 a	80 75 40
4-feruloylquinic acid	0.21 ± 0.01 a	0.120 ± 0.01 b	0.13 ± 0.005 b	0.04 ± 0.005 b	0.080 ± 0.002 a	0.08 ± 0.004 a	81 33 38
Total phenolic acids	**58.89 ± 9.6 a**	**24.11 ± 5.2 c**	**37.90 ± 11.2 b**	**37.05 ± 3.6 a**	**11.76 ± 1.0 c**	**30.60 ± 2.6 b**	**37 51 19**

Table S5. Phenolic acids content (mean ± SE, in mg/kg) and decrease (%) in coffees during successive extractions with different solvents (W: water, M: methanol; W:M water:methanol mix). Different letters in the table indicate statistical significance ($p \leq 0.05$) in phenolic content between solvents.

	First extraction (mg/kg)			Second extraction (mg/kg)			DECREASE (%)		
	W	**M**	**W:M**	**W**	**M**	**W:M**	**W**	**M**	**W:M**
INSTANT COFFEE									
3-p-coumaroylquinic acid	0.06 ± 0.01 a	0.03 ± 0.00 2 b	0.04 ± 0.00 5 ab	n.a	n.a	n.a	n.a	n.a	n.a
4-p-coumaroylquinic acid	0.14 ± 0.02 c	0.14 ± 0.02 a	0.16 ± 0.00 9 b	n.a	n.a	n.a	n.a	n.a	n.a
3-caffeoylquinic acid 1	4.44 ± 0.15 a	2.27 ± 0.11 b	2.56 ± 0.11 b	n.a	n.a	n.a	n.a	n.a	n.a
3-caffeoylquinic acid 2	1.99 ± 0.43 a	0.92 ± 0.08 b	1.32 ± 0.16 ab	n.a	n.a	n.a	n.a	n.a	n.a
4-caffeoylquinic acid	5.81 ± 0.23 a	2.93 ± 0.11 b	3.36 ± 0.22 b	n.a	n.a	n.a	n.a	n.a	n.a
5-caffeoylquinic acid	5.44 ± 0.02 c	9.09 ± 0.42 b	12.57 ± 0.76 a	n.a	n.a	n.a	n.a	n.a	n.a
Dicaffeoylquinic acid 1	0.39 ± 0.03 b	0.59 ± 0.03 a	0.39 ± 0.02 b	n.a	n.a	n.a	n.a	n.a	n.a
Dicaffeoylquinic acid 2	0.48 ± 0.02 a	0.43 ± 0.02 a	0.47 ± 0.02 a	n.a	n.a	n.a	n.a	n.a	n.a
Dicaffeoylquinic acid 3	0.35 ± 0.02 a	0.34 ± 0.02 a	0.36 ± 0.02 a	n.a	n.a	n.a	n.a	n.a	n.a
Dicaffeoylquinic acid 4	0.44 ± 0.02 a	0.44 ± 0.03 a	0.45 ± 0.03 a	n.a	n.a	n.a	n.a	n.a	n.a
Dicaffeoylquinic lactone	0.73 ± 0.02 c	3.74 ± 0.24 a	2.46 ± 0.09 b	n.a	n.a	n.a	n.a	n.a	n.a
3-feruloylquinic acid	0.24 ± 0.009 a	0.12 ±	0.14 ±	n.a	n.a	n.a	n.a	n.a	n.a

4-feruloylquinic acid	1.76 ± 0.06 b	0.005 b 3.99 ± 0.21 a	0.009 b 4.11 ± 0.26 a	n.a	n.a	n.a	n.a	n.a
5-feruloylquinic acid	0.02 ± 0.004 a	0.02 ± 0.01 a	0.03 ± 0.004 a	n.a	n.a	n.a	n.a	n.a
Total phenolic acids	**22.29 ± 1.0 c**	**25.05 ± 1.3 b**	**28.42 ± 1.7 a**	**n.a**	**n.a**	**n.a**	**n.a**	**n.a**
STANDARD COFFEE								
3-p-coumaroylquinic acid	0.01 ± 0.001 a	0.007 ± 0.001 b	0.009 ± 0.001 b	0.008 ± 0.001 b	0.004 ± 0.003 b	0.005 ± 0.002 ab	20	43 44
4-p-coumaroylquinic acid	0.06 ± 0.005 b	0.07 ± 0.002 a	0.02 ± 0.004 c	0.03 ± 0.004 a	0.04 ± 0.003 a	0.03 ± 0.003 a	50	43 -50
3-caffeoylquinic acid 1	3.13 ± 0.41 a	0.89 ± 0.02 b	2.19 ± 0.36 a	0.98 ± 0.07 b	0.71 ± 0.08 b	1.91 ± 0.32 a	69	20 13
3-caffeoylquinic acid 2	0.50 ± 0.05 a	0.24 ± 0.005 b	0.31 ± 0.03 b	0.26 ± 0.03 a	0.13 ± 0.01 b	0.19 ± 0.05 ab	48	46 39
4-caffeoylquinic acid	3.69 ± 0.46 a	1.08 ± 0.05 c	2.57 ± 0.33 b	1.40 ± 0.10 b	0.97 ± 0.008 b	1.98 ± 0.29 a	62	10 23
5-caffeoylquinic acid 1	6.13 ± 0.73 b	6.79 ± 0.21 b	16.32 ± 1.91 a	2.32 ± 0.15 c	6.39 ± 0.56 b	13.24 ± 1.84 a	62	6 19
5-caffeoylquinic acid 2	0.13 ± 0.02 a	0.12 ± 0.002 a	0.07 ± 0.02 b	0.07 ± 0.008 a	0.05 ± 0.004 b	0.07 ± 0.007 a	46	58 0
Dicaffeoylquinic acid 1	0.26 ± 0.02 ab	0.29 ± 0.02 a	0.19 ± 0.03 b	0.18 ± 0.02 a	0.14 ± 0.01 a	0.14 ± 0.009 a	31	52 26
Dicaffeoylquinic acid 2	0.59 ± 0.06 a	0.36 ±	0.42 ±	0.42 ± 0.05 a	0.29 ±	0.37 ±	29	19 12

Dicaffeoylquinic acid 3	0.45 ± 0.04 a	0.01 b 0.31 ± 0.01 b	0.05 a 0.33 ± 0.05 b	0.32 ± 0.04 a	0.01 b 0.24 ± 0.02 a	0.03 ab 0.29 ± 0.02 a	29	23	12
Dicaffeoylquinic acid 4	0.67 ± 0.06 a	0.49 ± 0.06 a	0.53 ± 0.19 ab	0.45 ± 0.06 a	0.36 ± 0.01 a	0.47 ± 0.03 a	33	27	11
Dicaffeoylquinic lactone	0.58 ± 0.06 c	3.96 ± 0.23 a	1.88 ± 0.09 b	0.33 ± 0.04 b	2.07 ± 0.10 a	1.94 ± 0.18 a	43	48	-3
3-feruloylquinic acid	0.15 ± 0.02 a	0.04 ± 0.00 2 c	0.11 ± 0.01 b	0.06 ± 0.004 b	0.04 ± 0.00 3 b	0.08 2 ± 0.01 a	60	0	25
4-feruloylquinic acid	0.59 ± 0.06 b	1.39 ± 0.04 a	1.63 ± 0.19 a	0.33 ± 0.04 c	0.82 ± 0.04 b	1.41 ± 0.12 a	44	41	13
5-feruloylquinic acid	0.009 ± 0.0009 b	0.01 ± 0.00 3 a	0.00 4 ± 0.00 05 c	0.09 ± 0.02 a	0.04 ± 0.00 3 b	0.11 ± 0.01 a	-900	-30	-2650
Total phenolic acids	**16.95 ± 2.0 b**	**16.05 ± 0.7 b**	**26.58 ± 3.3 a**	**7.25 ± 0.6**	**12.29 ± 0.9**	**22.24 ± 2.9**	**57**	**23**	**16**
INTENSE COFFEE									
3-*p*-coumaroylquinic acid	traces	traces	traces	traces	traces	traces			
4-*p*-coumaroylquinic acid	0.07 ± 0.005 a	0.03 ± 0.01 c	0.05 ± 0.00 4 b	0.009 ± 0.0005 ab	0.000 ± 0.00 08 b	0.01 ± 0.00 2 a	87	73	80
3-caffeoylquinic acid 1	0.47 ± 0.03 a	0.05 ± 0.00 6 b	0.31 ± 0.07 a	0.11 ± 0.007 a	0.03 ± 0.00 3 b	0.15 ± 0.02 a	77	40	52
3-caffeoylquinic acid 2	1.99 ± 0.43 a	0.92 ± 0.08 b	1.32 ± 0.16 ab	0.08 ± 0.05 b	0.04 ± 0.00 5 c	0.14 ± 0.02 a	96	96	89
4-caffeoylquinic acid	0.53 ± 0.03 a	0.10 ± 0.00 6 c	0.37 ± 0.03 b	0.13 ± 0.007 a	0.04 ± 0.00 2 b	0.17 ± 0.06 a	75	60	54
5-caffeoylquinic acid	0.82 ± 0.05 b	0.42 ±	2.21 ±	0.18 ± 0.01 b	0.24 ±	1.06 ±	78	43	52

Dicaffeoylquinic acid 2	0.12 ± 0.01 a	0.03 ± 0.00 7 c	0.19 ± 0.08 ± 0.00 7 b	0.08 ± 0.009 a	0.01 ± 0.00 4 b	0.15 ± 0.10 ± 0.02 a	33	98 -25
Dicaffeoylquinic acid 3	0.13 ± 0.009 a	0.04 ± 0.02 c	0.08 ± 0.00 6 b	0.07 ± 0.009 a	0.01 ± 0.00 3 b	0.09 ± 0.02 a	46	75 -13
Dicaffeoylquinic acid 4	0.18 ± 0.01 a	0.06 ± 0.01 c	0.12 ± 0.01 b	0.09 ± 0.01 a	0.02 ± 0.00 1 b	0.13 ± 0.22 a	50	67 -8
Dicaffeoylquinic lactone	0.27 ± 0.02 b	0.85 ± 0.07 a	0.94 ± 0.09 a	0.09 ± 0.006 c	0.29 ± 0.03 b	0.56 ± 0.08 a	67	66 40
3-feruloylquinic acid	0.02 ± 0.001 a	0.04 ± 0.00 02 c	0.01 ± 0.00 1 b	traces	trac es	trac es		
4-feruloylquinic acid	0.23 ± 0.01 b	0.23 ± 0.00 8 b	0.67 ± 0.06 a	0.03 ± 0.002 c	0.12 ± 0.00 9 b	0.23 ± 0.03 a	87	48 66
5-feruloylquinic acid	0.01 ± 0.0008 a	0.00 4 ± 0.00 2 c	0.00 8 ± 0.00 07 b	0.02 ± 0.005 b	0.000 7 ± 0.00 08 b	0.04 ± 0.00 6 a	-100	- - 75 400
Total phenolic acids	**4.84 ± 0.6 b**	**3.16 ± 0.2 c**	**6.17 ± 0.6 a**	**0.89 ± 0.1 b**	**0.82 ± 0.5 b**	**2.68 ± 0.6 a**	**82**	**74 57**