

Table 1: Post-Hoc analysis for multiple comparisons of the mean effects studied in the general linear regression of the factorial design for main flavor-active phenolic compounds

Multiple Comparisons		Mean Difference (I-J)	Standard Error (SE)	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
(a) Kaempferol 3-O-(2''-O-sinapoyl-β-sophoroside) (KSS)						
Concentration (I)	Concentration (J)					
30	40	-117.96*	13.50	0.00	-153.07	-82.86
	60	-286.40*	13.50	0.00	-321.51	-251.30
	70	-274.20*	13.50	0.00	-309.30	-239.10
40	30	117.96*	13.50	0.00	82.86	153.07
	60	-168.44*	13.50	0.00	-203.54	-133.34
	70	-156.23*	13.50	0.00	-191.34	-121.13
60	30	286.40*	13.50	0.00	251.30	321.51
	40	168.44*	13.50	0.00	133.34	203.54
	70	12.21	13.50	0.80	-22.90	47.31
70	30	274.20*	13.50	0.00	239.10	309.30
	40	156.23*	13.50	0.00	121.13	191.34
	60	-12.21	13.50	0.80	-47.31	22.90
Temperature (I)	Temperature (J)					
140	160	-58.91*	11.70	0.00	-86.61	-31.21
	180	146.45*	11.70	0.00	118.75	174.15
160	140	58.91*	11.70	0.00	31.21	86.61
	180	205.36*	11.70	0.00	177.67	233.06
180	140	-146.45*	11.70	0.00	-174.15	-118.75
	160	-205.36*	11.70	0.00	-233.06	-177.67
(b) Kaempferol 3-O-β-sophoroside (KS)						
Concentration (I)	Concentration (J)					
30	40	-2.09*	0.63	0.01	-3.71	-0.46
	60	-12.93*	0.63	0.00	-14.56	-11.31
	70	-27.15*	0.63	0.00	-28.78	-25.53
40	30	2.09*	0.63	0.01	0.46	3.71
	60	-10.84*	0.63	0.00	-12.47	-9.22
	70	-25.06*	0.63	0.00	-26.69	-23.44
60	30	12.93*	0.63	0.00	11.31	14.56
	40	10.84*	0.63	0.00	9.22	12.47
	70	-14.22*	0.63	0.00	-15.84	-12.59
70	30	27.15*	0.63	0.00	25.53	28.78
	40	25.06*	0.63	0.00	23.44	26.69
	60	14.22*	0.63	0.00	12.59	15.84
(c) Thomasidioic acid (TA)						
Concentration (I)	Concentration (J)					
30	40	-3.01*	0.43	0.00	-4.20	-1.83
	60	-8.99*	0.43	0.00	-10.19	-7.79
	70	-9.85*	0.43	0.00	-11.04	-8.66
40	30	3.01*	0.43	0.00	1.82	4.20
	60	-5.98*	0.43	0.00	-7.17	-4.78
	70	-6.84*	0.43	0.00	-8.02	-5.66

(Table 1 Cont'd)		Mean	Standard	Sig	95% Confidence Interval	
Multiple Comparisons		Difference (I-J)	Error (SE)		Lower Bound	Upper Bound
60	30	8.99*	0.43	0.00	7.79	10.19
	40	5.98*	0.43	0.00	4.78	7.17
	70	-0.86	0.43	0.27	-2.06	0.33
70	30	9.85*	0.43	0.00	8.66	11.04
	40	6.84*	0.43	0.00	5.66	8.02
	60	0.86	0.43	0.27	-0.33	2.06
Temperature (I)	Temperature (J)					
140	160	-2.34	0.35	0.00	-3.17	-1.51
	180	-0.19	0.35	0.84	-1.02	0.63
160	140	2.34	0.35	0.00	1.51	3.17
	180	2.15	0.35	0.00	1.31	2.98
180	140	0.19	0.35	0.84	-0.63	1.02
	160	-2.15	0.35	0.00	-2.98	-1.31
(d) Sinapine						
Concentration (I)	Concentration (J)					
30	40	-0.10*	0.00	0.00	-0.11	-0.09
	60	-0.49*	0.00	0.00	-0.50	-0.48
	70	-0.83*	0.00	0.00	-0.84	-0.82
40	30	0.10*	0.00	0.00	0.09	0.11
	60	-0.39*	0.00	0.00	-0.40	-0.38
	70	-0.73*	0.00	0.00	-0.74	-0.72
60	30	0.49*	0.00	0.00	0.48	0.50
	40	0.39*	0.00	0.00	0.38	0.40
	70	-0.34*	0.00	0.00	-0.35	-0.33
70	30	0.83*	0.00	0.00	0.82	0.84
	40	0.73*	0.00	0.00	0.72	0.74
	60	0.34*	0.00	0.00	0.33	0.35
Temperature (I)	Temperature (J)					
140	160	-0.10*	0.00	0.00	-0.11	-0.09
	180	-0.01*	0.00	0.01	-0.02	-0.00
160	140	0.10*	0.00	0.00	0.09	0.11
	180	0.09*	0.00	0.00	0.08	0.09
180	140	0.01*	0.00	0.01	0.00	0.02
	160	-0.08*	0.00	0.00	-0.09	-0.08
(e) Sinapic acid						
Concentration (I)	Concentration (J)					
30	40	-0.08*	0.01	0.00	-0.11	-0.05
	60	-0.37*	0.01	0.00	-0.39	-0.34
	70	-0.87*	0.01	0.00	-0.90	-0.85
40	30	0.08*	0.01	0.00	0.05	0.11
	60	-0.29*	0.01	0.00	-0.32	-0.26
	70	-0.79*	0.01	0.00	-0.82	-0.77
60	30	0.37*	0.01	0.00	0.34	0.39
	40	0.29*	0.01	0.00	0.26	0.32
	70	-0.51*	0.01	0.00	-0.54	-0.48

(Table 1 Cont'd)		Mean Difference (I-J)	Standard Error (SE)	Sig	95% Confidence Interval			
Multiple Comparisons					Lower Bound	Upper Bound		
Temperature (I)	70	30	0.87*	0.01	0.00	0.85	0.90	
		40	0.79*	0.01	0.00	0.77	0.82	
		60	0.51*	0.01	0.00	0.48	0.54	
		140	160	-0.18*	0.01	0.00	-0.21	-0.16
			180	-0.08*	0.01	0.00	-0.10	-0.05
		160	140	0.18*	0.01	0.00	0.16	0.21
			180	0.10*	0.01	0.00	0.08	0.13
		180	140	0.08*	0.01	0.00	0.05	0.10
			160	-0.10*	0.01	0.00	-0.13	-0.08
(f) Canolol								
Concentration (I)	Concentration (J)							
30		40	-0.01	0.02	0.95	-0.05	0.03	
		60	-0.60*	0.02	0.00	-0.64	-0.55	
		70	-0.90*	0.02	0.00	-0.94	-0.86	
40		30	0.01	0.02	0.95	-0.03	0.05	
		60	-0.59*	0.02	0.00	-0.63	-0.54	
		70	-0.89*	0.02	0.00	-0.93	-0.85	
60		30	0.60*	0.02	0.00	0.55	0.64	
		40	0.59*	0.02	0.00	0.54	0.63	
		70	-0.30*	0.02	0.00	-0.35	-0.26	
70		30	0.90*	0.02	0.00	0.86	0.94	
		40	0.89*	0.02	0.00	0.85	0.93	
		60	0.30*	0.02	0.00	0.26	0.35	
Temperature (I)	Temperature (J)							
140		160	-0.36*	0.01	0.00	-0.39	-0.32	
		180	-0.57*	0.01	0.00	-0.61	-0.54	
160		140	0.36*	0.01	0.00	0.32	0.39	
		180	-0.21*	0.01	0.00	-0.25	-0.18	
180		140	0.57*	0.01	0.00	0.54	0.61	
		160	0.21*	0.01	0.00	0.18	0.25	

Sig: level of significance ($P < 0.05$); *: mean difference is significantly different ($P < 0.05$)