

**UHPLC-MS/SRM Method for Analysis of Phenolics from *Camellia sinensis*
Leaves from Nilgiri Hills**

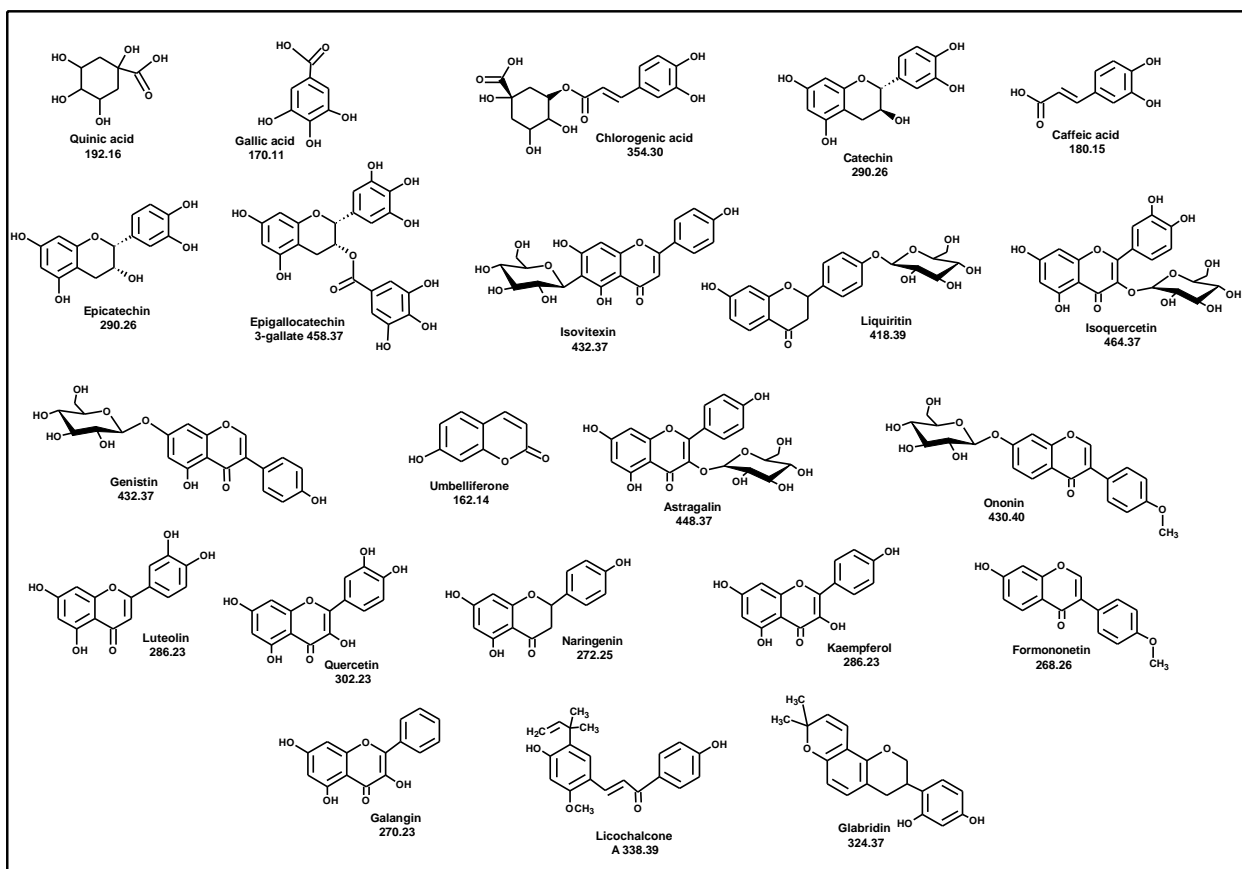
Supplementary Data

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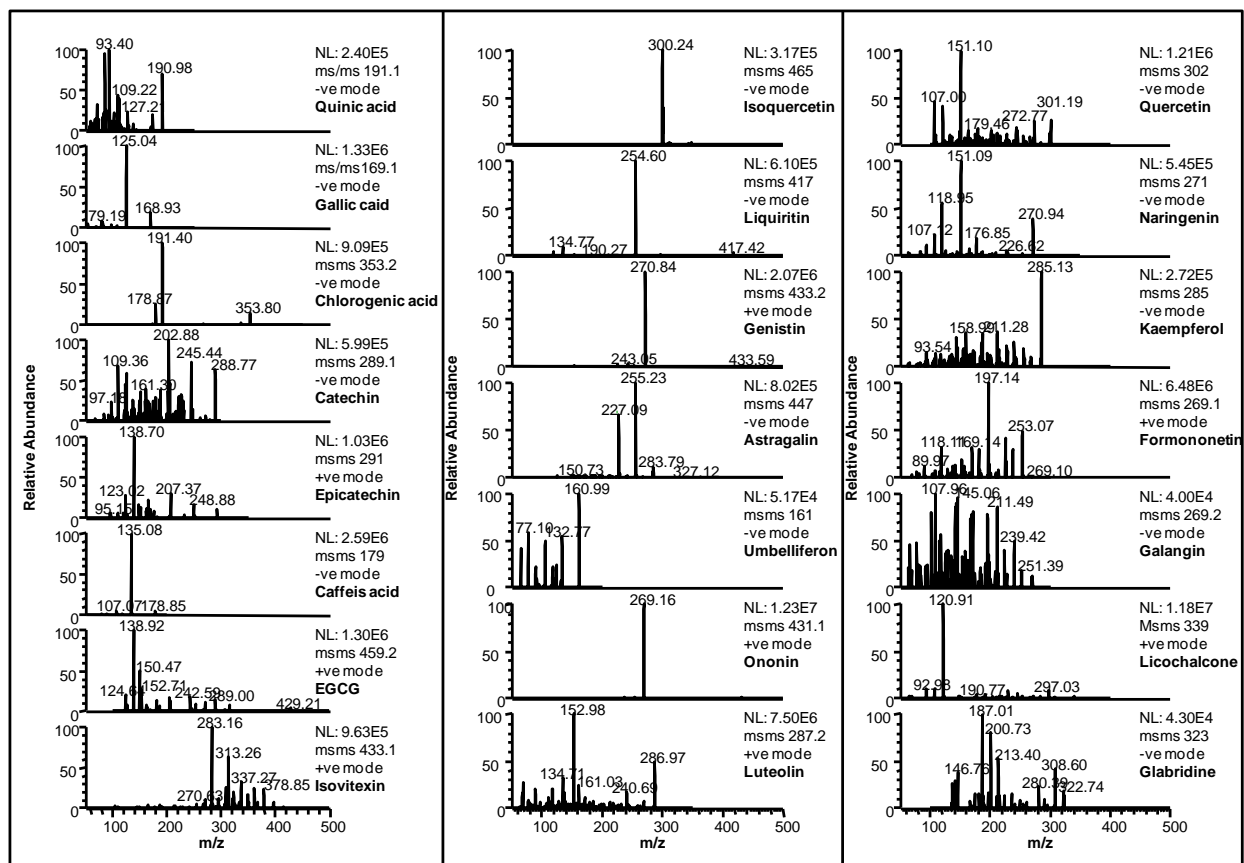
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Supplementary Figure 1: Chemical structure for all twenty two phenolics analyzed in this study.



Supplementary Figure 2: MS/MS analysis of all twenty two phenolics analyzed in both positive and negative ion modes.

Supplementary table 1: Regression analysis of the standard curve.

Phenolics	Slope		Intercept		R ²	
	Mean	SD	Mean	SD	Mean	SD
Quinic acid	0.025	0.002	0.004	0.006	0.999	0.002
Gallic acid	0.518	0.083	0.340	0.118	0.996	0.002
Chlorogenic acid	0.771	0.064	0.012	0.006	0.999	0.001
Catechin	0.177	0.023	0.016	0.013	0.999	0.002
Epicatechin	0.132	0.035	0.013	0.011	0.997	0.001
Caffeic acid	2.099	0.300	0.047	0.026	0.998	0.001
Epigallocatechin-3-gallate	0.173	0.015	0.009	0.011	0.997	0.001
Isovitexin	1.801	0.277	0.010	0.009	0.997	0.004
Isoquercetin	1.841	0.065	0.015	0.016	0.998	0.001
Liquiritin	2.364	0.202	0.010	0.010	0.999	0.001
Genistin	4.513	0.636	0.003	0.004	0.999	0.001
Astragalin	1.654	0.091	0.010	0.010	1.000	0.000
Umbelliferone	1.186	0.112	0.020	0.017	0.998	0.002
Ononin	35.909	1.739	0.014	0.005	0.999	0.002
Luteolin	0.658	0.061	0.013	0.004	0.997	0.001
Quercetin	0.612	0.070	0.023	0.044	0.998	0.002
Naringenin	2.052	0.111	0.041	0.045	0.999	0.001
Kaempferol	0.117	0.008	0.017	0.012	0.997	0.003
Formononetin	9.099	0.278	0.005	0.005	0.998	0.003
Galangin	0.354	0.061	0.008	0.003	0.998	0.001
Licochalcone A	31.002	0.586	0.003	0.002	0.998	0.002
Glabridin	0.833	0.042	0.004	0.003	0.999	0.000

Supplementary table 2: Validation table for twenty two phenolics.

	LOQ	LQC	MQC	HQC
Quinic acid				
ng on column	1.563	3.125	20.000	40.000
interday mean	1.537	3.093	20.115	41.820
%CV (n=3)	4.937	2.714	1.943	2.028
accuracy	98.374	98.989	100.574	104.550
Epicatechin				
ng on column	0.313	0.625	4.000	8.000
interday mean	0.323	0.668	3.913	8.220
%CV (n=3)	5.595	6.314	6.749	2.207
accuracy	103.295	106.807	97.831	102.755
Isoquercetin				
ng on column	0.063	0.125	0.800	1.600
interday mean	0.066	0.133	0.845	1.766
%CV (n=3)	3.637	5.592	1.986	2.008
accuracy	105.657	106.093	105.597	110.356
Umbelliferone				
ng on column	0.078	0.156	1.000	2.000
interday mean	0.077	0.159	1.038	2.083
%CV (n=3)	3.197	2.624	2.941	2.285
accuracy	98.715	101.660	103.756	104.153
Naringenin				
ng on column	0.156	0.313	2.000	4.000
interday mean	0.149	0.318	2.009	4.078
%CV (n=3)	1.405	2.022	2.105	1.424
accuracy	95.337	101.765	100.469	101.951
Licochalcone A				
ng on column	0.002	0.003	0.020	0.040
interday mean	0.002	0.003	0.020	0.040
%CV (n=3)	6.561	4.350	1.674	1.613
accuracy	102.231	105.875	101.847	99.860
Gallic acid				
ng on column	0.781	1.563	10.000	20.000
interday mean	0.709	1.602	10.516	21.079
%CV (n=3)	4.960	7.320	2.794	1.916
accuracy	90.759	102.517	105.162	105.393
Caffeic acid				
ng on column	0.078	0.156	1.000	2.000
interday mean	0.071	0.163	1.039	2.077
%CV (n=3)	3.740	2.265	2.186	1.933
accuracy	91.249	104.125	103.949	103.846
Liquiritin				
ng on column	0.031	0.063	0.400	0.800
interday mean	0.032	0.067	0.416	0.853
%CV (n=3)	2.555	2.744	1.628	1.614
accuracy	101.218	106.468	104.091	106.594
Ononin				
ng on column	0.002	0.003	0.020	0.040
interday mean	0.001	0.003	0.020	0.040
%CV (n=3)	5.352	2.867	1.216	2.243
accuracy	95.044	99.889	100.513	99.683
Kaempferol				
ng on column	0.781	1.563	10.000	20.000
interday mean	0.689	1.582	10.222	20.526
%CV (n=3)	3.192	2.269	3.011	2.245
accuracy	88.247	101.220	102.220	102.631
Glabridin				
ng on column	0.063	0.125	0.800	1.600
interday mean	0.063	0.130	0.792	1.620
%CV (n=3)	4.459	1.834	3.792	2.077
accuracy	100.108	104.071	99.034	101.237
Chlorogenic acid				
ng on column	0.156	0.313	2.000	4.000
interday mean	0.147	0.307	1.974	4.001
%CV (n=3)	2.583	2.926	1.986	1.514
accuracy	94.090	98.380	98.720	100.024
Epigallocatechin 3-gallate				
ng on column	0.313	0.625	4.000	8.000
interday mean	0.309	0.598	3.936	8.104
%CV (n=3)	6.802	9.777	5.135	2.595
accuracy	98.735	95.671	98.404	101.294
Genistin				
ng on column	0.016	0.031	0.200	0.400
interday mean	0.016	0.033	0.205	0.420
%CV (n=3)	5.021	3.402	2.678	2.369
accuracy	104.402	106.063	102.291	104.945
Luteolin				
ng on column	0.078	0.156	1.000	2.000
interday mean	0.078	0.153	1.010	2.105
%CV (n=3)	6.108	5.629	2.338	2.656
accuracy	100.242	97.665	100.982	105.244
Formononetin				
ng on column	0.003	0.006	0.040	0.080
interday mean	0.003	0.006	0.040	0.080
%CV (n=3)	7.515	3.584	1.408	1.747
accuracy	99.058	102.298	100.658	100.088
Catechin				
ng on column	0.313	0.625	4.000	8.000
interday mean	0.316	0.637	4.001	8.165
%CV (n=3)	5.386	2.210	3.619	2.185
accuracy	101.042	101.922	100.020	102.063
Isovitexin				
ng on column	0.031	0.063	0.400	0.800
interday mean	0.031	0.065	0.388	0.783
%CV (n=3)	6.935	7.107	3.563	3.040
accuracy	100.505	103.670	96.933	97.818
Astragalin				
ng on column	0.063	0.125	0.800	1.600
interday mean	0.064	0.133	0.845	1.697
%CV (n=3)	1.638	2.527	1.870	3.148
accuracy	102.750	106.118	105.632	106.048
Quercetin				
ng on column	0.156	0.313	2.000	4.000
interday mean	0.169	0.292	1.949	4.052
%CV (n=3)	2.884	1.613	1.775	3.204
accuracy	108.379	93.521	97.440	101.293
Galangin				
ng on column	0.078	0.156	1.000	2.000
interday mean	0.083	0.156	1.019	2.096
%CV (n=3)	3.725	1.582	3.660	3.389
accuracy	106.382	99.850	101.923	104.790