

**Table S1.** The detection wavelengths, retention time, regressive equations and correlation coefficient of six flavonoid glycosides.

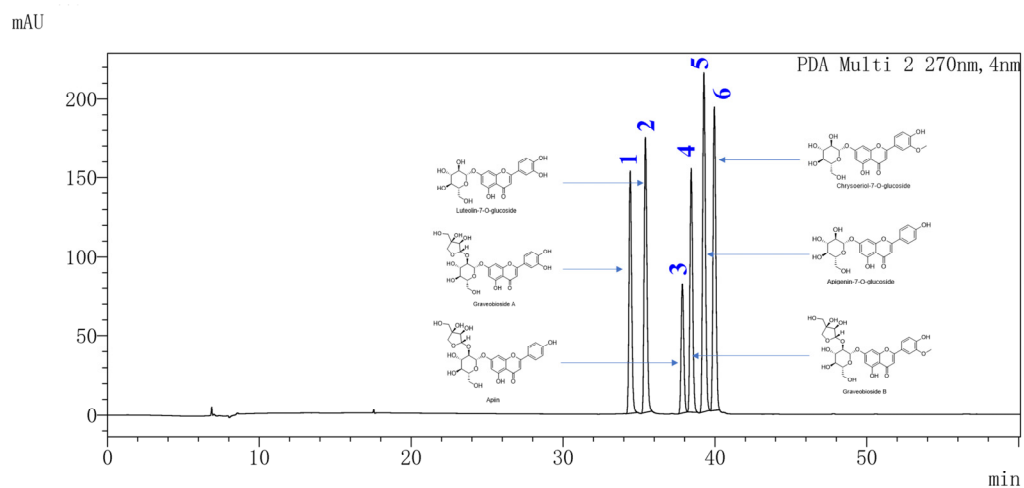
No.	Flavonoids	Detection wavelengths	Retention time (min)	Regressive equations <sup>a</sup>	R <sup>2</sup>
1	Graveobioside A	270 nm	34.266	y = 33.603x + 825.73	0.9999
2	Luteolin-7-O-glucoside	270 nm	35.276	y = 51.599x - 1251.8	0.9999
3	Apiin	270 nm	37.810	y = 60.778x + 537.85	0.9999
4	Graveobioside B	270 nm	38.394	y = 39.306x + 2397.9	0.9999
5	Apigenin-7-O-Glucoside	270 nm	39.106	y = 84.896x + 41.423	0.9999
6	Chrysoeriol-7-O-glucosid	270 nm	39.952	y = 46.219x + 278.37	0.9999

<sup>a</sup> The y value is the peak area of flavonoid glycosides and the x is the concentration of samples (ng/mL).

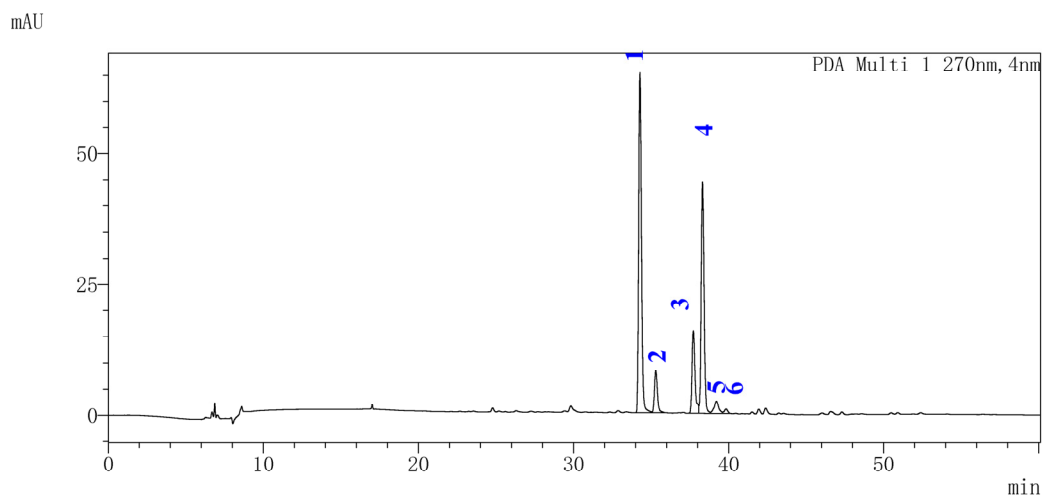
**Table S2.** Pearson's correlation coefficients (r) for the relationships between antioxidant assays, phenolic contents and flavonoid contents.

Variables	TPC	TFC	DPPH	ABTS	FRAP	CUPRAC
TFC	0.922 **					
DPPH	0.621 *	0.462				
ABTS	0.796 **	0.609 *	0.602 *			
FRAP	0.970 **	0.978 **	0.529 *	0.695 *		
CUPRAC	0.983 **	0.958 **	0.571 *	0.732 **	0.996 **	
Metal Chelating	0.701 **	0.552 *	0.638 *	0.488	0.602 *	0.639 *

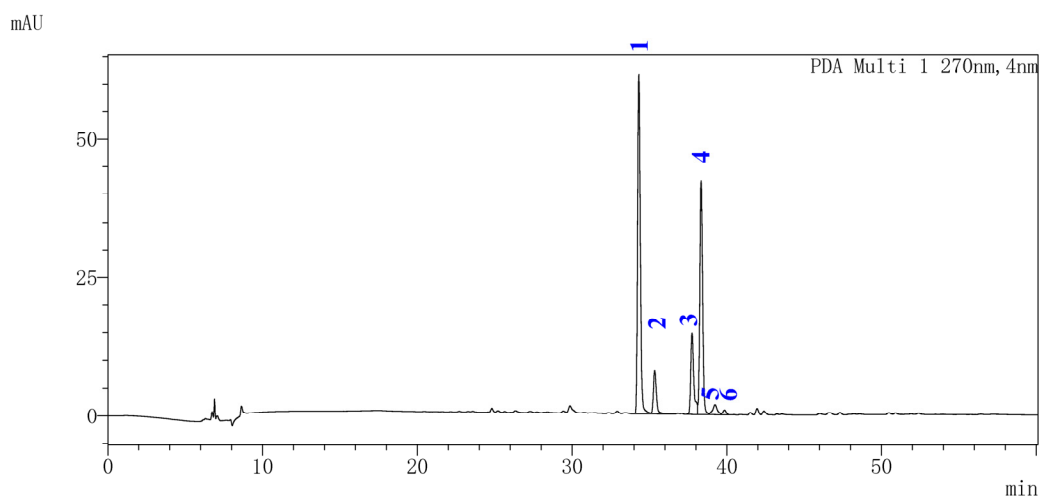
\*\* Significant correlation with p < 0.01; \* Significant correlation with p < 0.05.



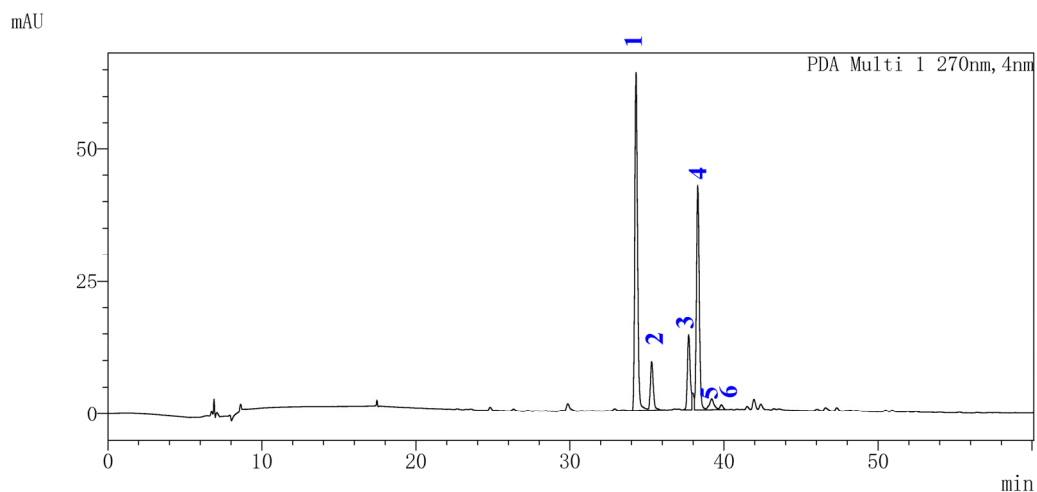
(a) Chromatograms of the standards.



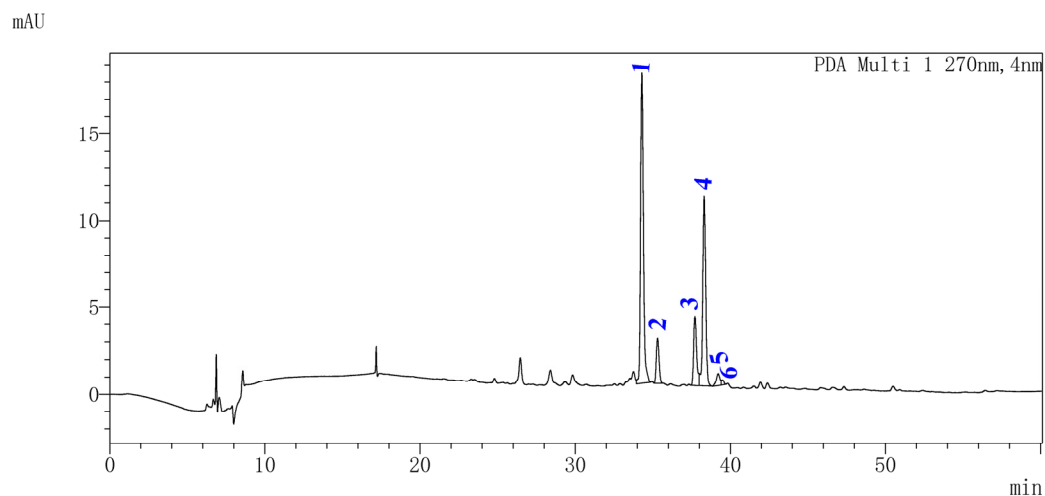
(b) Chromatograms of the n-butanol fractions from Shandong, China samples.



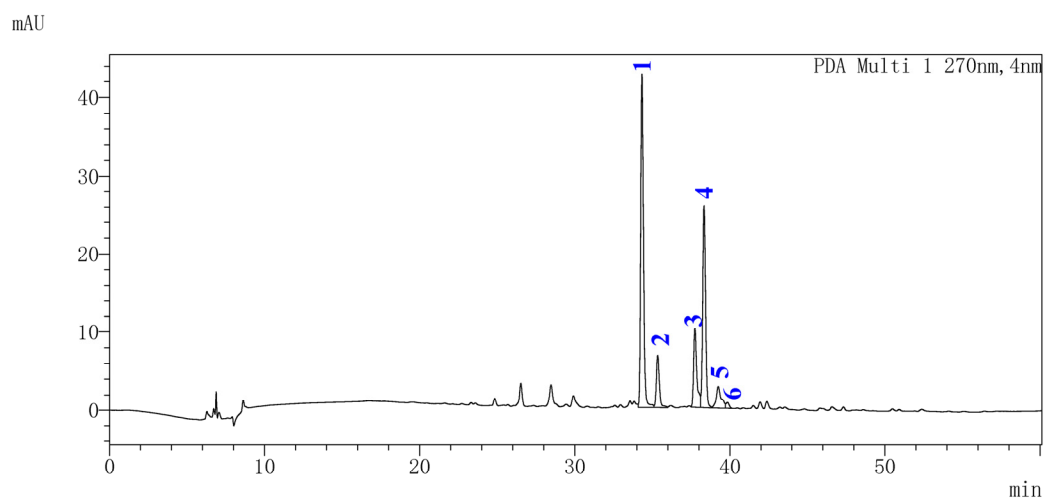
(c) Chromatograms of the n-butanol fractions from Guangxi, China samples.



(d) Chromatograms of the n-butanol fractions from Northeast, China samples.



(e) Chromatograms of the n-butanol fractions from Jiangsu, China samples.



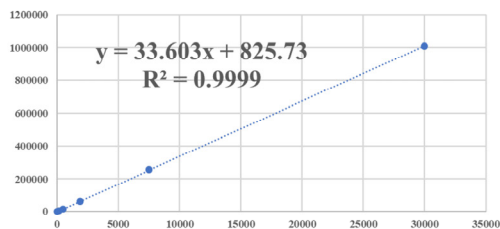
(f) Chromatograms of the n-butanol fractions from Hubei, China samples.

**Figure S1.** Chromatogram of the standards and n-butanol fractions from five samples.

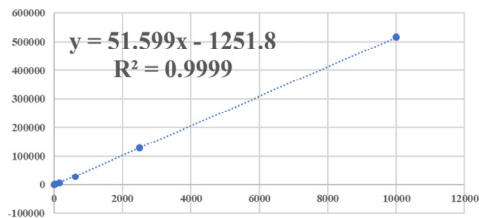
1: Graveobioside A; 2: Luteolin-7-O-glucoside; 3: Apiin; 4: Graveobioside B; 5: Apigenin-7-O-glucoside; 6:

Chrysoeriol-7-O-glucoside.

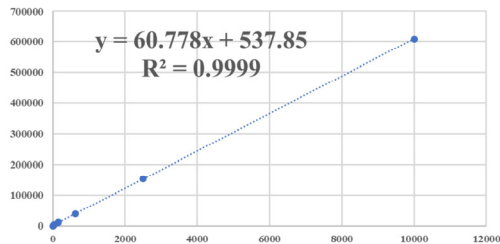
**A. Gracvobioside A**



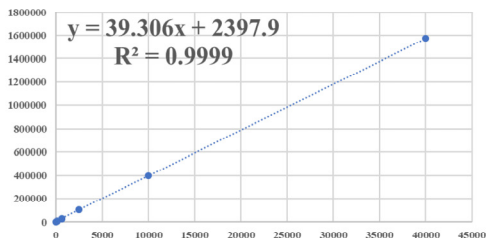
**B. Luteolin-7-O-glucoside**



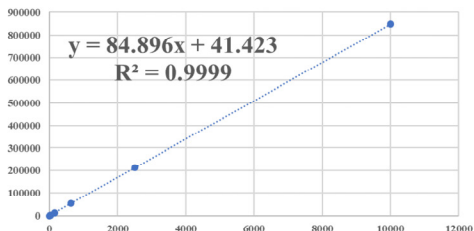
**C. Apiin**



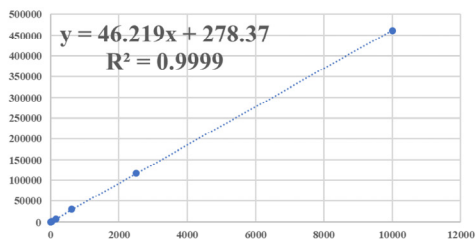
**D. Gracvobioside B**



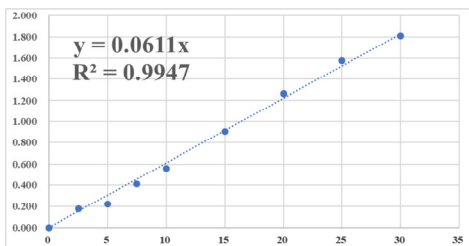
**E. Apigenin-7-O-Glucoside**



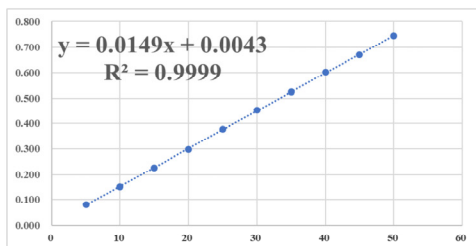
**F. Chrysoeriol-7-O-glucosid**



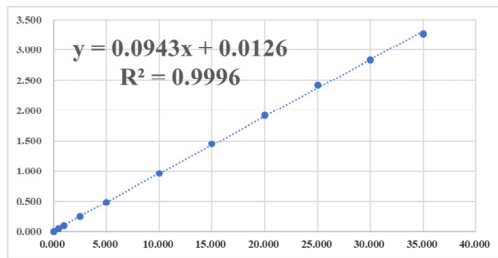
**G. TPC**



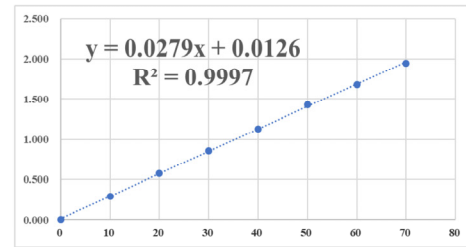
**H. TFC**



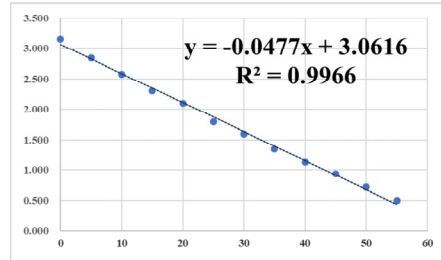
**I. FRAP**



**J. CUPRAC**



**K. Metal Chelating**



**Figure S2.** The standard curve of six flavonoid glycosides and TPC, TFC, FRAP, CUPRAC and metal chelating.