

**Exploring Bioactive Compounds in Brown Seaweeds Using Subcritical Water:  
A Comprehensive Analysis**

**Supplementary Data**

**Table S1.** Proximate composition (%) of three brown seaweeds used in this experiment.

Seaweed	Moisture	Ash	Crude Lipid	Crude Protein	Carbohydrate
<i>S. thunbergii</i>	9.75±0.17 <sup>b</sup>	26.02±0.34 <sup>a</sup>	13.64±0.13 <sup>a</sup>	1.01±0.15 <sup>c</sup>	49.58±0.02 <sup>c</sup>
<i>U. pinnatifida</i>	5.33±1.33 <sup>bc</sup>	20.62±0.98 <sup>b</sup>	1.15±0.87 <sup>b</sup>	18.33±0.43 <sup>a</sup>	54.57±0.12 <sup>b</sup>
<i>S. japonica</i>	10.44±0.14 <sup>a</sup>	16.79±0.98 <sup>c</sup>	1.38±0.19 <sup>b</sup>	8.53±0.22 <sup>b</sup>	62.87±0.94 <sup>a</sup>

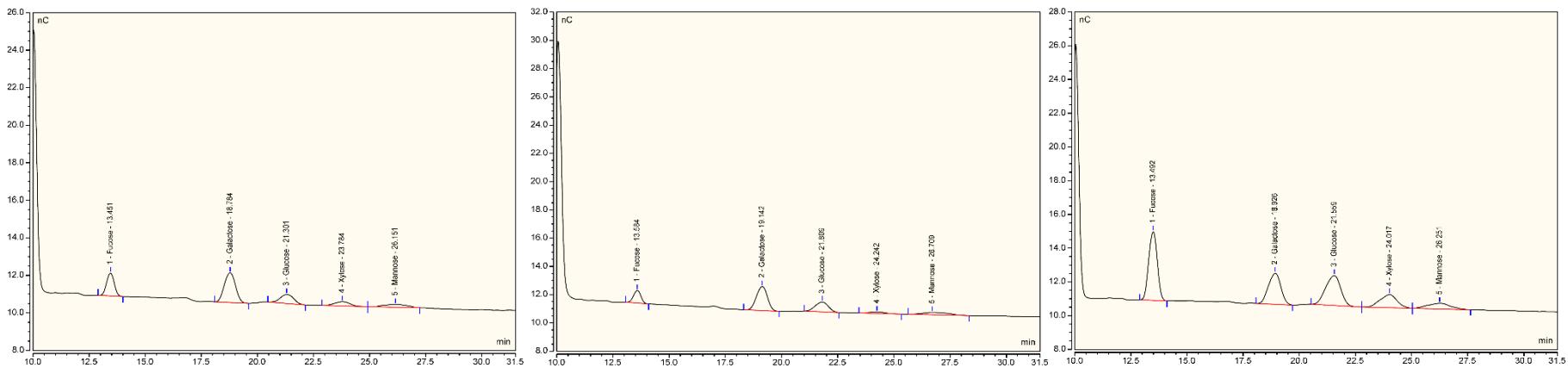
- Values are expressed as mean ± SD.
- Different letters indicate significant differences ( $p<0.05$ ) according to Duncan's multiple range test.

**Table S2.** Pearson's correlation coefficients of MRPs and sugar contents.

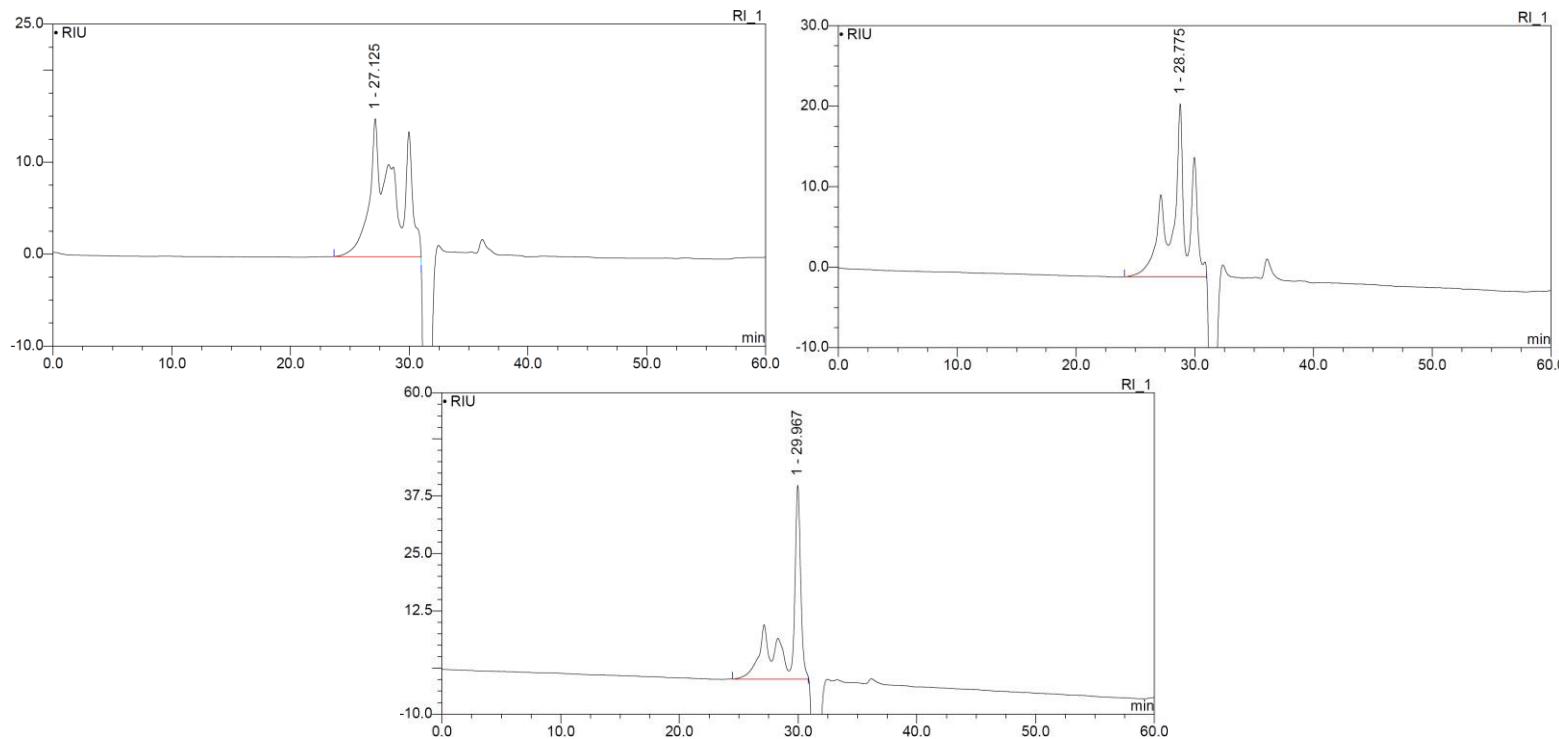
Trait	a294	a420	a294/a420	TSC	RSC
<b>a294</b>	1	0.987**	-0.936**	0.451 <sup>ns</sup>	0.761*
<b>a420</b>	-	1	-0.980**	0.580 <sup>ns</sup>	0.841**
<b>a294/a420</b>	-		1	-0.720*	-0.914**



**Figure S1.** Visual appearance of 3 types of brown seaweeds extracts obtained using subcritical water ( a: *S. thunbergii*, b: *U. pinnatifida*, c: *S. japonica* ) .



**Figure S2.** Monosaccharides composition chromatograms of BSEs.



**Figure S3.** GPC Chromatogram of BSE.