

Supplementary Materials

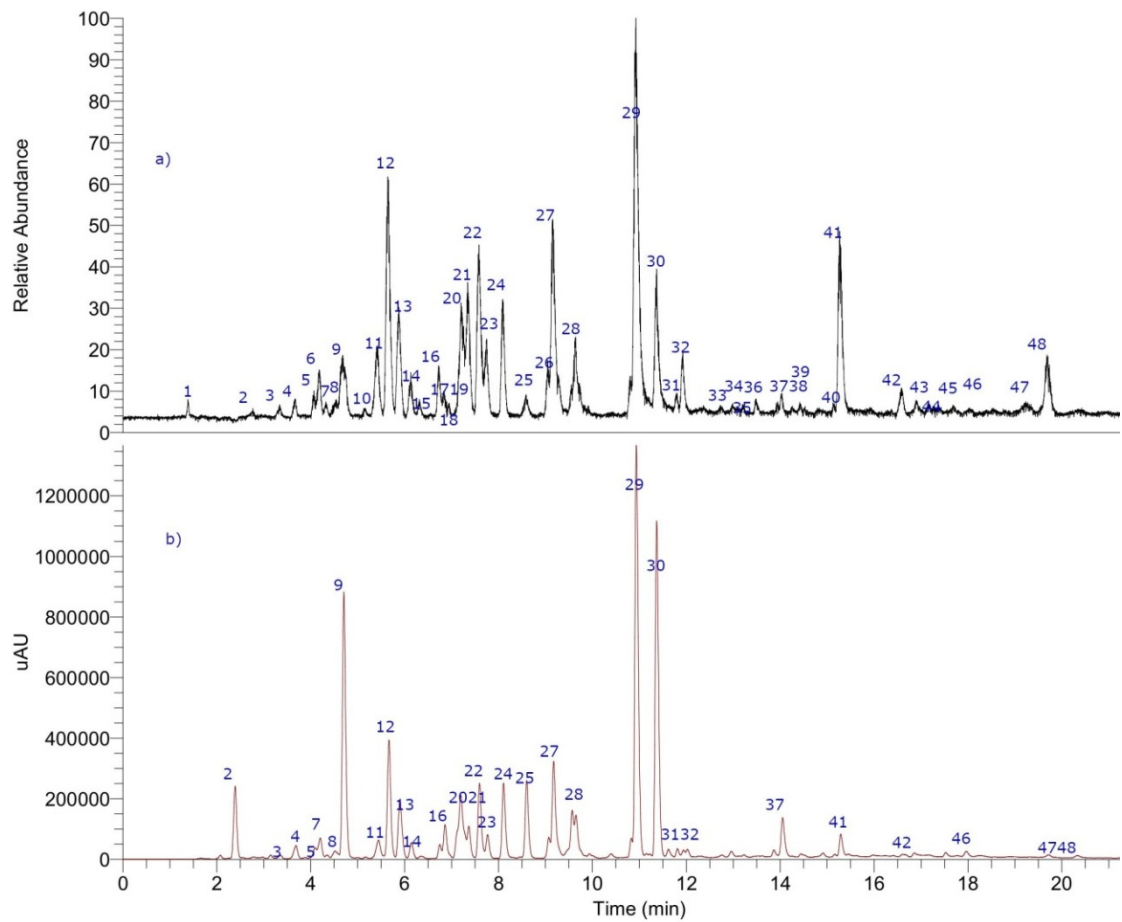


Figure S1. The HPLC-MS Fingerprints of ZpRe resin: **(a)** The total Ion Current (TIC) chromatogram and **(b)** the UV-vis chromatogram at 280 nm.

Table S1. High resolution UHPLC–PDA–Q-Orbitrap identification of biomolecules from ZpRe resin.

	Retention Time (min.)	UV Max	Tentative Identification	Elemental Composition [M-H] ⁻	Theoretical Mass (m/z)	Measured Mass (m/z)	Accuracy (δ ppm)	MS ⁿ Ions
1	1.33		unknown	C ₁₆ H ₁₅ O ₅	85.00343			
2	2.77	279	Naringenin	C ₁₅ H ₁₁ O ₅	271.06110	271.0601	3.67	

3	3.35	279-367	Shikoniin	C ₁₆ H ₁₅ O ₅	287.09325	287.0923	3.40	
4	3.65	279	Afzelechin	C ₁₅ H ₁₃ O ₅	273.07575	273.0766	3.22	
5	4.05	-	Calonectrin	C ₁₉ H ₂₅ O ₆	349.16456	349.1654	2.58	85.00342
6	4.18	279	EpiAfzelechin	C ₁₅ H ₁₃ O ₅	273.07575	273.0766	3.10	
7	4.28	287	Naringenin isomer (could be butein)	C ₁₅ H ₁₁ O ₅	271.06195	271.0611	3.67	151.0394; 109.0286
8	4.31	287	3,7- dihydroxiflavanone	C ₁₅ H ₁₁ O ₄	255.06519	255.0661	3.67	151.0394; 109. 0286
9	4.61	287	7,8-dihydroxiflavone	C ₁₅ H ₁₁ O ₄	255.06519	255.0661	3.11	237.0553;
10	5.12	287	5-Hydroxy-4',7- dimethoxyflavanone	C ₁₇ H ₁₅ O ₅	299.09140	299.0929	2.95	285.0403; 179.0345, 135.0444 (100)
11	5.38	287	3,7,8 Trihydroxydihydroflavanone	C ₁₅ H ₁₁ O ₅	271.06010	271.0610	3.33	253.0503; 225.0552; 197.0603; 151.0029
12	5.67	234-292- 125	1-methyl-3-(3',4'- dihydroxyphenyl)-propyl caffeic acid ester	C ₁₉ H ₁₉ O ₆	343.11761	343.1187	2.49	179.0344; 161.0236; 135.0443
13	5.88	236-277- 112	1-methyl-3-(3',4'- dihydroxyphenyl)-propyl caffeic acid ester isomer	C ₁₉ H ₁₉ O ₆	343.11761	343.1183	2.22	257.0818; 179.0345; 151.0393; 135.0444; 107.0494
14	5.88	236-277- 112	Guibourtinidol	C ₁₅ H ₁₃ O ₄	257.08084	257.0816	3.10	179.0345; 151.0393; 135.0444; 107.0494
15	6.14	279-367	1-methyl-3-(3',4'- dihydroxyphenyl)-propyl caffeic acid ester isomer	C ₁₉ H ₁₉ O ₆	343.11853	343.1187	2.66	287.0818; 151.0393; 119.0495; 107.0494
16	6.14	279-367	Shikoniinisomer	C ₁₆ H ₁₅ O ₅	287.09140	287.0923	3.18	151.0393; 119.0495; 107.0494
17	6.27	285	7,4'-dihydroxy-5methoxy flavanone	C ₁₆ H ₁₃ O ₅	285.07575	285.0766	3.19	149.9952; 119.0495
18	6.73	287	Dihydroxyflavanone	C ₁₅ H ₁₁ O ₄	255.06519	255.0669	3.05	237.0553; 209.0604; 195.0400

19	6.91	251-349	Rhamnetin	C ₁₆ H ₁₁ O ₇	315.04993	315.0511	3.18	185.00346; 146.93796
20	7.18	246-324	3,7-dihydroxyflavone	C ₁₅ H ₉ O ₄	253.05029		2.99	208.0524; 223.0326
21	7.31	277-314	1-methyl-3-(4'-hydroxyphenyl)-propyl caffeic acid ester	C ₁₉ H ₁₉ O ₅	327.12357	327.1227	2.64	135.0443;
22	7.55	242, 291- 324	2-methyl-3-(3-hydroxy-4'-methoxyphenyl)-propyl caffeic acid ester	C ₂₀ H ₂₁ O ₆	357.13409	357.1332	2.32	343.1104; 193.0500; 179.0343; 161.0237; 135.0440;
23	7.70	249-285- 323	1-methyl-3-(4'-hydroxyphenyl)-propyl caffeic acid ester isomer	C ₁₉ H ₁₉ O ₅	327.12380	327.1227	3.01	179.0344; 163.0394; 135.0443; 119.0494
24	8.04	235-343	Pinocembrin(5, 7-dihydroxyflavanone)	C ₁₅ H ₁₁ O ₄	255.06601	255.0651	3.23	227.0907; 213.0503; 164.0109; 151.0029; 123.0080
25	8.54	239-306	2'-hidroxy-4methoxichalcone	C ₁₆ H ₁₃ O ₃	253.08592	253.0866	3.02	
26	9.00	291	Pinocembrinisomer	C ₁₅ H ₁₁ O ₄	255.06599	255.0651	3.17	227.0709; 213.0553; 164.0109; 145.0642; 123.0080
27	9.14	267 315 360	Galangin(3,5,7-trihydroxyflavone)	C ₁₅ H ₉ O ₅	269.04579	269.0453	3.22	213.0551; 169.0653;
28	9.61	242-268- 310-357	Caffeic acid phenetylesther	C ₁₇ H ₁₅ O ₄	283.09649	283.0794	3.38	
29	10.90	232-346	2',4'-dihydroxychalcone	C ₁₅ H ₁₁ O ₃	239.07027	239.0710	2.91	197.0603; 169.0653; 153.0186; 135.0080;
30	11.37	232-345	2',4'-dihydroxy-3'-methoxychalcone	C ₁₆ H ₁₃ O ₄	269.08167	269.0808	3.08	
31	11.88	231-308- 347	1-methyl-3-(4'-hydroxyphenyl)-propyl p-coumaric acid ester isomer	C ₁₉ H ₁₉ O ₄	311.12866	311.1289	2.81	179.0344; 163.0394; 135.0444; 119.0494
32	12.01	277-312	Dunnione	C ₁₅ H ₁₃ O ₃	241.08592	241.0866	2.98	
33	12.78	287	Flavanone	C ₁₅ H ₁₁ O ₃	239.07027	239.0709	2.91	197.0603; 169.0653; 153.0186;

								135.0080; 121.0280
34	13.00		unknown					
35	13.37		unknown					
36	13.50	285	Blestriarene B	C ₃₀ H ₂₃ O ₆	479.14957	479.14891	1.36	
37	14.10	280-323	4'-terbutyloxyphenyl p-coumaric acid ester isomer	C ₁₉ H ₁₉ O ₄	311.12779	311.1286	2.71	179.0344; 161.0237; 135.0442;
38	14.52	283	Glyvenol	C ₂₉ H ₃₃ O ₆	477.22754	477.2271	0.78	
39	14.55	293	1-methyl-3-(3',4'-dihydroxyphenyl)-propyl caffeic acid ester isomer	C ₁₉ H ₁₉ O ₆	343.11761	343.1183		179.0344; 161.0238;135.0442; 109.0286
40	15.40	280	Vedelianin	C ₂₉ H ₃₅ O ₆	479.24882	479.2433	1.17	
41	15.47	280	Hidroxivedelianin	C ₂₉ H ₃₅ O ₇	495.23773	495.2381	0.82	161.0238; 135.0443; 109.0286
42	16.60		3,7-dimethyl-2-octaenyl caffeic acid ester	C ₁₉ H ₂₁ O ₄	313.14344	313.1443	2.91	
43	17.04	267-357	Hidroxivedelianin isomer	C ₂₉ H ₃₅ O ₇	495.23785	495.2377	0.25	479.24323, 239.0710; 179.0345; 161.0238; 135.0442;
44	17.12	285	Vedelianin derivative	C ₂₉ H ₃₃ O ₆	477.22717	477.2276	1.10	
45	17.56	285-320	3,7-dimethyl-2,6-octadienyl caffeic acid ester (geranyl Caffate)	C ₁₉ H ₂₃ O ₄	315.16993	315.1600	3.10	178.0265; 134.0364; 133.0289
46	17.98	289-320	Lupinifolin	C ₂₅ H ₂₅ O ₆	405.16965	405.1754	-1.27	
47	19.58	289	Vedelianin isomer	C ₂₉ H ₃₅ O ₆	479.24882	479.2433	1.17	
48	19.99	287	Shinflavanone	C ₂₅ H ₂₅ O ₄	389.17474	389.1756	2.37	371.1654