

**Table S1.** Chemical characteristics of *C. denticulatum* subjected to different energy levels of UV-B radiation at 4 days after treatment using UPLC-LTQ-Orbitrap-MS.

NO.	RT (min)	Tentative metabolites <sup>a</sup>	Measured <i>m/z</i>		MS <sup>n</sup> fragment	M.W.	M.F.	Error (ppm)	<i>p</i> -value	Ref.
			negative	positive						
1	0.84	Quinic acid	191.0565	-	191>172,111	192	C <sub>7</sub> H <sub>12</sub> O <sub>6</sub>	2.1	0.087	[1],
2	2.18	Caftaric acid	311.0409	335.0375	311>179, 149>131	312	C <sub>13</sub> H <sub>12</sub> O <sub>9</sub>	0.9	0.088	[1]
3	4.96	Luteolin-7-O-b-D-glucoside	447.0945	449.1067	447>285,241>198	448	C <sub>21</sub> H <sub>20</sub> O <sub>11</sub>	2.2	0.004	[2]
4	4.97	Luteolin-7-O-b-D-glucuronide	461.0735	463.0855	461>285,241>198	462	C <sub>21</sub> H <sub>18</sub> O <sub>12</sub>	1.2	0.000	[1]
5	5.09	11β,13-Dihydroixerin Z	423.1696	425.1798	423>243	424	C <sub>21</sub> H <sub>28</sub> O <sub>9</sub>	1.5	0.009	[3]
6	5.15	Di-O-caffeoylquinic acid	515.1196	517.3142	515>353>191	516	C <sub>25</sub> H <sub>24</sub> O <sub>12</sub>	0.1	0.243	[1],[2]
7	5.78	N. I.	423.2240	447.2202	423>291>161	424	-	-	0.000	
8	5.91	Youngiaside B	557.2045	581.1990	557>423,243>199	558	C <sub>29</sub> H <sub>34</sub> O <sub>11</sub>	1.2	0.000	[2]
9	6.39	N. I.	379.1982	403.1833	379>335>291	380	-	-	0.000	
10	6.48	Ixerin U	-	587.2149		588	C <sub>30</sub> H <sub>36</sub> O <sub>12</sub>	2.5	0.326	[4]
11	6.55	N. I.	413.2196	437.2156	-	414	-	-	0.000	
12	6.71	Ixerochinoside	691.2408	715.2359	691>447>175	692	C <sub>37</sub> H <sub>40</sub> O <sub>13</sub>	1.7	0.000	[3], [5]
13	7.90	N. I.	675.3613	699.3546	675>397>235	676	-	-	0.000	
14	8.58	N. I.	559.3134	-	-	560	-	-	0.000	
15	8.95	N. I.	325.1847	-	-	324	-	-	0.001	
16	9.40	N. I.	339.2007	-	-	340	-	-	0.000	

RT, retention time; M.W., molecular weight; M.F., molecular formula; Ref., Reference; <sup>a</sup> Identified metabolites based on VIP > 0.7 both PLS 1 and PLS 2 by PLS-DA; Metabolites were tentatively identified by matching molecular weight and formula, MS<sup>n</sup>, and references.

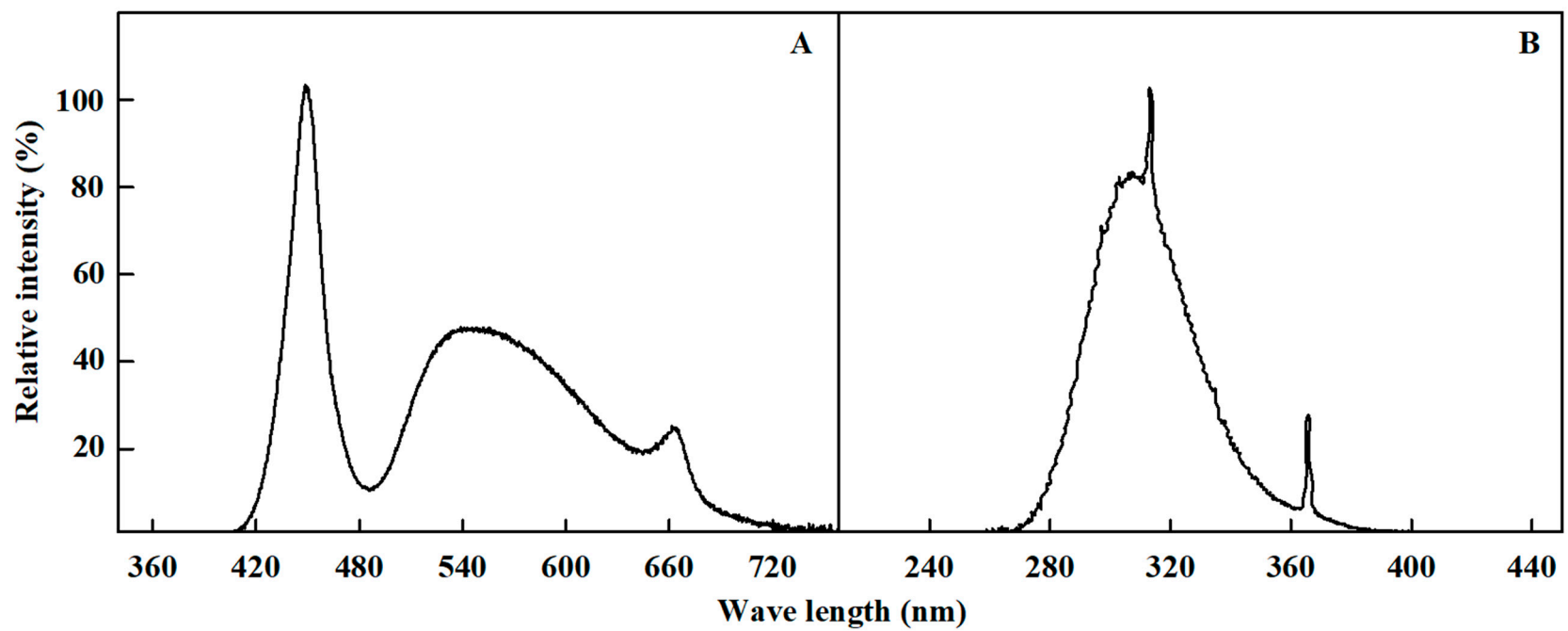


Figure S1. Relative spectral distributions white LEDs (A) and a UV-B lamps (B).

## References

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