

**Table S1.** The phytochemical composition of leaves of the 5 *Hypericum* species by HPLC-HRMS. Selected mass ion intensities of emodin (**1**), emodin anthrone (**2**), protopseudohypericin (**3**), pseudohypericin (**4**), protohypericin (**5**), hypericin (**6**), skyrin (**7**), oxyskyrin-6-*O*- $\beta$ -glucopyranoside (**8**), skyrin-6-*O*- $\beta$ -glucopyranoside (**9**), 1,2,4,5-tetrahydroxy-7-(hydroxymethyl)-9,10-anthraquinone (**10**), and 1,2,4,5-tetrahydroxy-7-methyl-9,10-anthraquinone-2-*O*- $\beta$ -glucopyranoside (**11**) are shown; n.d. = not detected or below the limit of detection (<LOD); LOQ = limit of quantitation.

| Species                | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8    | 9    | 10       | 11       |
|------------------------|----------|----------|----------|----------|----------|----------|----------|------|------|----------|----------|
| <i>H. humifusum</i>    | 9.50E+04 | <LOQ     | 2.26E+06 | n.d.     | 1.06E+06 | 7.45E+05 | 2.05E+05 | n.d. | n.d. | 2.76E+03 | 1.70E+05 |
| <i>H. bupleuroides</i> | n.d.     | 1.32E+07 | n.d.     | n.d.     | <LOQ     | n.d.     | 1.13E+04 | n.d. | n.d. | n.d.     | n.d.     |
| <i>H. annulatum</i>    | 1.94E+04 | 5.29E+04 | 2.91E+06 | 1.33E+06 | 1.08E+06 | 1.10E+06 | 1.91E+05 | n.d. | n.d. | 1.55E+05 | 4.17E+05 |
| <i>H. tetrapterum</i>  | 2.07E+04 | <LOQ     | 4.61E+05 | 1.00E+06 | 1.66E+05 | 5.42E+05 | 2.36E+05 | n.d. | n.d. | n.d.     | 2.43E+05 |
| <i>H. rumeliacum</i>   | 1.75E+05 | n.d.     | 1.01E+06 | 5.76E+05 | 8.66E+05 | 3.77E+05 | 1.10E+05 | n.d. | n.d. | 1.53E+05 | 1.10E+05 |