**SUPPLEMENTARY MATERIALS**

Histochemical localization and cytotoxic potential of alkaloids in *Phaedranassa lehmannii*

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**Table S1.** Amaryllidaceae alkaloids identified in *Phaedranassa lehmannii* by GC–MS.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Alkaloids** | **RI1** | **M+** | **m/z** **(Relative Intensity %)** | **Bulb** | **Root** |
| **% relative2** | **µg/gDW3** | **% relative2** | **µg/g DW3** |
| **Narciclasine type** |  |  |  | **12.95** | **3.75** | **4.23** | **13.74** |
| Trisphaeridine | 2235 | 223 | 223(100), 222(40), 167(12), 165(10), 164(14), 138(21), 111(12). | 12.95 | 3.75 | 3.49 | 11.33 |
| 5,6-Dihydrobicolorine | 2250 | 239 | 239(15), 238(100), 180(8), 139(3). | nd | nd | 0.74 | 2.41 |
| **Galanthamine type**  |  |  |  | **27.76** | **8.04** | **22.27** | **72.35** |
| Galanthamine | 2316 | 287 | 287(86), 286(100), 244(26), 230(13), 216(33), 174(31), 128(15), 115(18). | 8.53 | 2.47 | 11.58 | 37.63 |
| Sanguinine | 2348 | 273 | 273(100), 272(74), 256(19), 212(12), 202(33), 160(43). | 13.12 | 3.80 | 10.69 | 34.72 |
| Epigalanthamine | 2403 | 287 | 287(100), 286(86), 270(23), 244(18), 230(23), 216(29), 174(39), 128(21), 115(22). | 6.11 | 1.77 | nd | nd |
| **Crinane type**  |  |  |  | **33.83** | **9.80** |  |  |
| Crinine | 2388 | 271 | 271(100), 270(18), 228(24), 200(32), 199(73), 187(70), 173(24), 129(32), 128(31), 115(37), 56(36). | 3.56 | 1.03 | nd | nd |
| 8-*O*-Demethylmaritidine | 2416 | 273 | 273(100), 230(23), 202(26), 201(91), 189(57), 175(24), 174(18), 129(17), 128(19), 115(20), 56(22). | 30.27 | 8.77 | nd | nd |
| **Haemanthamine type** |  |  |  |  |  | **4.17** | **13.55** |
| Hamayne | 2620 | 258 | 287(10), 258(100), 242(14), 212(15), 211(18), 186(17), 181(18), 153(11), 128(16). | nd | nd | 4.17 | 13.55 |
| **Lycorine type** |  |  |  | **23.44** | **6.79** | **67.86** | **220.51** |
| Anhydrolycorine | 2405 | 251 | 251(45), 250(100), 220(2), 192(12), 191(11), 165(3), 124(7). | nd | nd | 41.15 | 133.71 |
| 11,12-Dehydroanhydrolycorine | 2519 | 249 | 249(60), 248(100), 190(23), 163(8), 123(7), 95(18). | nd | nd | 3.95 | 12.83 |
| Lycorine | 2654 | 287 | 287(25), 268(20), 250(12), 227(64), 226(100), 211(4), 147(10). | 23.44 | 6.79 | 22.76 | 73.97 |
| **Miscellaneous** |  |  |  | **2.04** | **0.59** | **1.47** | **4.78** |
| Sternbergine | 2695 | 331 | 331(29), 270(26), 252(14), 229(60), 228(100). | 2.04 | 0.59 | 1.47 | 4.78 |

1.RI: Kovats retention index.

2.Percentages of relative peak area of compounds in the samples analyzed.

3.Quantitative values obtained by response factor using codeine as internal standard (µg of alkaloid per g of dry weight). nd: not detected.