**Supplementary Material**

NEUROBEHAVIORAL AND ANTIOXIDANT EFFECTS OF ETHANOLIC EXTRACT OF YELLOW PROPOLIS

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**Tabel 1S – Relative percentage of triterpenes identified by GC – MS (electron ionization) in a yellow Brazilian propolis extract.**

|  |  |  |
| --- | --- | --- |
| *tR*(min) | Compounds | Relative composition (%) |
| 12.5 | Lanosterol | 3.41 |
| 12.6 | 9,19-Cyclolanost-7-en-3-ol | 1.39 |
| 13.5 | *β*- Amyrin | 13.64 |
| 13.8 | Lup-20(29)-en-3-ona | 11.79 |
| 14.0 | Lupeol | 44.80 |
| 14.9 | Olean-12-en-3 one | 6.35 |
| 15.0 | Olean-12-en-3-yl acetate | 2.97 |
| 15.1 | Olean-18-en-3-ol | 2.10 |
| 15.6 | 13,27-cycloursan-3-ol (3*β*, 13*β*,14*β*) acetate | 6.09 |
|  | Unidentified compounds | 6.73 |

**TABLE 2S –Comparison of 1H-NMR data of lupeol (δppm, m, *J* Hz*,* at 600 MHz, solvent D2O+CD3OD) in yellow propolis and 1H-NMR data from literature.**



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Position | 1H-NMR | 1H-NMR a | 1H-NMR b | 1H-NMR c | 1H-NMRd |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 | 3.14 (dd, *J*= 11.19; 4.55 Hz) | 3.18 (1H, dd) | 3.16 (1H, dd) | 3.18 (dd) |  |
| 4 |  |  |  |  |  |
| 5 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 7 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| 9 |  |  |  |  |  |
| 10 |  |  |  |  |  |
| 11 |  |  |  |  |  |
| 12 |  |  |  |  |  |
| 13 | 1.90 (m) |  | 1.89 (1H, m) | 1.67 (t) | 1.68 (m) |
| 14 |  |  |  |  |  |
| 15 |  |  |  |  |  |
| 16 |  |  |  |  |  |
| 17 |  |  |  |  |  |
| 18 |  |  |  |  |  |
| 19 | 2.40 (m) | 2.38 (1H, m) | 2.35 (1H, m) | 2.39 (m) | 2.37 (m) |
| 20 |  |  |  |  |  |
| 21 |  |  |  |  |  |
| 22 |  |  |  |  |  |
| 23 | 0.76 (s) | 0.76 (3H, s) | 0.73 (3H, s) | 0.98 (s) |  |
| 24 | 0.82 (s) | 0.79 (3H, s) | 0.76 (3H, s) | 0.77 (s) |  |
| 25 | 0.86 (s) | 0.83 (3H, s) | 0.80 (3H, s) | 0.84 (s) | 0.85 (s) |
| 26 | 0.95 (s) | 0.94 (3H, s) | 0.91 (3H, s) | 1.04 (s) | 1.08 (s) |
| 27 | 0.97 (s) | 0.97 (3H, s) | 0.94 (3H, s) | 0.97 (s) | 0.97 (s) |
| 28 | 1.06 (s) |  | 1.01 (3H, s) | 0.79 (s) | 0.80 (s) |
| 29 | 4.58 (m); 4.69 (d) | 4.57; 4.68 (d) | 4.53; 4.65 (2H, s) | 4.58 (m); 4.69 (m) | 4.58 (s); 4.70 (s) |
| 30 | 1.70 (s) | 1.68 (3H, s) | 1.65 (3H, s) | 1.69 (s) | 1.70 (s) |

a Data reported by Marinho 2008 (CDCl3; 500 MHz), b Maldaner 2005 (CDCl3; 400 MHz), c Reynolds et al., (1986) and d de Albuquerque et al., (2007).

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