Table S1. Chemical composition of studied honey samples (g/100 g)

|  |  |
| --- | --- |
|  | *Tuxtla Chico* |
|  | **M1** | **M2** | **M3** | **M4** | **M5** | **M6** | **M7** | **M8** | **M9** | **M10** | **M11** | **M12** | **min** | **max** | **avg.** |
| **G** | 23.64 | 25.24 | 23.50 | 23.61 | 20.22 | 18.85 | 18.07 | 18.29 | 17.40 | 21.83 | 24.83 | 18.52 | 17.40 | 25.24 | 21.17 |
| **F** | 27.60 | 30.57 | 28.99 | 29.27 | 28.93 | 27.74 | 27.27 | 27.74 | 26.81 | 29.29 | 29.73 | 28.16 | 26.81 | 30.57 | 28.51 |
| **Gb** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.20 | 0.14 | 0.00 | 0.20 | 0.04 |
| **Su** | 0.18 | 0.00 | 0.11 | 0.10 | 0.00 | 0.10 | 0.15 | 0.16 | 0.14 | 0.11 | 0.10 | 0.11 | 0.00 | 0.18 | 0.10 |
| **IMa** | 0.69 | 0.57 | 0.73 | 0.74 | 0.68 | 0.55 | 0.68 | 0.66 | 0.57 | 0.63 | 0.84 | 0.49 | 0.49 | 0.84 | 0.65 |
| **IMu** | 0.83 | 0.59 | 0.00 | 0.60 | 0.55 | 0.46 | 0.82 | 0.56 | 0.60 | 0.39 | 1.05 | 0.67 | 0.00 | 1.05 | 0.59 |
| **Kb** | 1.98 | 1.75 | 2.05 | 1.83 | 2.48 | 2.56 | 2.61 | 2.74 | 2.57 | 2.40 | 1.52 | 2.88 | 1.52 | 2.88 | 2.28 |
| **Lu** | 0.27 | 0.20 | 0.24 | 0.23 | 0.26 | 0.20 | 0.25 | 0.23 | 0.26 | 0.26 | 0.31 | 0.17 | 0.17 | 0.31 | 0.24 |
| **Ma** | 1.17 | 1.34 | 1.64 | 1.23 | 2.00 | 2.03 | 1.97 | 2.51 | 2.12 | 1.94 | 1.11 | 2.37 | 1.11 | 2.51 | 1.79 |
| **Mu** | 3.68 | 2.63 | 3.21 | 3.44 | 3.74 | 4.16 | 3.60 | 4.10 | 4.12 | 2.70 | 3.06 | 3.49 | 2.63 | 4.16 | 3.49 |
| **Ng** | 0.83 | 1.01 | 0.93 | 0.83 | 1.22 | 1.16 | 1.05 | 0.94 | 1.07 | 1.32 | 0.72 | 1.16 | 0.72 | 1.32 | 1.02 |
| **ααTr** | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.08 | 0.02 |
| **αβTr** | 0.42 | 0.33 | 0.39 | 0.40 | 0.36 | 0.46 | 0.40 | 0.44 | 0.42 | 0.31 | 0.34 | 0.34 | 0.31 | 0.46 | 0.38 |
| **Tru** | 8.94 | 6.71 | 7.86 | 8.39 | 9.27 | 9.96 | 9.77 | 10.29 | 10.61 | 6.98 | 7.50 | 8.72 | 6.71 | 10.61 | 8.75 |
| **Tu** | 2.43 | 2.15 | 2.57 | 2.38 | 3.18 | 3.61 | 3.24 | 3.81 | 3.68 | 2.49 | 1.95 | 3.29 | 1.95 | 3.81 | 2.90 |
| **Er** | 0.32 | 0.19 | 0.27 | 0.24 | 0.23 | 0.95 | 1.19 | 0.52 | 0.80 | 0.73 | 0.15 | 0.84 | 0.15 | 1.19 | 0.54 |
| **1-Ks** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Mr** | 0.31 | 0.27 | 0.39 | 0.25 | 0.45 | 0.56 | 0.34 | 0.32 | 0.43 | 0.36 | 0.00 | 0.45 | 0.00 | 0.56 | 0.34 |
| **Mz** | 0.15 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.02 |
| **Pa** | 0.24 | 0.23 | 0.33 | 0.33 | 0.39 | 0.52 | 0.39 | 0.39 | 0.50 | 0.29 | 0.14 | 0.42 | 0.14 | 0.52 | 0.35 |
| **mBd** | 0.03 | 0.05 | 0.03 | 0.06 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.06 | 0.02 |
| **rBd** | 0.04 | 0.02 | 0.02 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.04 | 0.01 |
| **Pro** | 0.03 | 0.00 | 0.00 | 0.03 | 0.03 | 0.01 | 0.02 | 0.02 | 0.04 | 0.03 | 0.04 | 0.03 | 0.00 | 0.04 | 0.02 |
| **U1-16** | 3.82 | 2.92 | 3.58 | 3.74 | 4.00 | 4.12 | 4.00 | 4.23 | 4.24 | 3.00 | 3.26 | 3.64 | 2.92 | 4.24 | 3.71 |
|  | *Cacahoatán* |
|  | **M13** | **M14** | **M15** | **M16** | **M17** | **M18** | **M19** | **M20** | **M21** | **M22** | **M23** | **M24** | **min** | **max** | **avg.** |
| **G** | 14.58 | 19.16 | 18.56 | 16.40 | 17.85 | 17.47 | 16.84 | 20.04 | 17.13 | 16.31 | 18.67 | 16.78 | 14.58 | 20.04 | 17.48 |
| **F** | 25.67 | 28.04 | 27.66 | 26.45 | 27.12 | 26.71 | 26.97 | 28.13 | 26.67 | 24.26 | 27.47 | 26.64 | 24.26 | 28.13 | 26.82 |
| **Gb** | 0.10 | 0.17 | 0.00 | 0.04 | 0.00 | 0.11 | 0.12 | 0.16 | 0.06 | 0.07 | 0.00 | 0.00 | 0.00 | 0.17 | 0.07 |
| **Su** | 0.18 | 0.00 | 0.08 | 0.09 | 0.22 | 0.14 | 0.08 | 0.10 | 0.13 | 0.21 | 0.10 | 0.16 | 0.00 | 0.22 | 0.12 |
| **IMa** | 0.62 | 0.70 | 0.52 | 0.56 | 0.66 | 0.80 | 0.67 | 0.56 | 0.66 | 0.67 | 0.68 | 0.73 | 0.52 | 0.80 | 0.65 |
| **IMu** | 0.72 | 0.80 | 0.93 | 0.73 | 0.45 | 0.55 | 0.61 | 0.41 | 0.74 | 0.64 | 0.57 | 0.67 | 0.41 | 0.93 | 0.65 |
| **Kb** | 2.48 | 2.34 | 2.34 | 2.49 | 2.38 | 2.01 | 2.48 | 2.34 | 2.48 | 2.53 | 2.32 | 2.37 | 2.01 | 2.53 | 2.38 |
| **Lu** | 0.30 | 0.20 | 0.28 | 0.24 | 0.26 | 0.31 | 0.27 | 0.18 | 0.25 | 0.30 | 0.32 | 0.24 | 0.18 | 0.32 | 0.26 |
| **Ma** | 2.02 | 1.92 | 1.76 | 1.90 | 1.85 | 1.43 | 1.84 | 2.00 | 1.94 | 2.07 | 1.79 | 2.02 | 1.43 | 2.07 | 1.88 |
| **Mu** | 5.24 | 4.12 | 4.59 | 4.97 | 4.34 | 4.93 | 4.92 | 3.50 | 4.04 | 4.80 | 4.16 | 4.35 | 3.50 | 5.24 | 4.50 |
| **Ng** | 1.04 | 1.46 | 1.31 | 1.25 | 1.31 | 1.05 | 1.35 | 1.68 | 1.12 | 1.31 | 1.09 | 1.24 | 1.04 | 1.68 | 1.27 |
| **ααTr** | 0.00 | 0.02 | 0.05 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.11 | 0.02 |
| **αβTr** | 0.39 | 0.37 | 0.36 | 0.43 | 0.40 | 0.41 | 0.36 | 0.33 | 0.38 | 0.39 | 0.34 | 0.40 | 0.33 | 0.43 | 0.38 |
| **Tru** | 12.65 | 9.42 | 10.26 | 11.82 | 10.46 | 11.38 | 11.05 | 8.49 | 10.63 | 11.86 | 9.89 | 11.04 | 8.49 | 12.65 | 10.74 |
| **Tu** | 4.71 | 3.42 | 3.67 | 4.00 | 3.82 | 3.42 | 4.23 | 3.14 | 3.70 | 4.25 | 3.36 | 3.70 | 3.14 | 4.71 | 3.79 |
| **Er** | 1.72 | 1.00 | 1.12 | 1.52 | 1.40 | 1.11 | 1.44 | 1.06 | 1.47 | 1.30 | 1.06 | 1.28 | 1.00 | 1.72 | 1.29 |
| **1-Ks** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Mr** | 0.53 | 0.28 | 0.33 | 0.29 | 0.37 | 0.41 | 0.39 | 0.44 | 0.57 | 0.36 | 0.39 | 0.41 | 0.28 | 0.57 | 0.40 |
| **Mz** | 0.09 | 0.05 | 0.06 | 0.00 | 0.07 | 0.09 | 0.00 | 0.07 | 0.06 | 0.00 | 0.00 | 0.04 | 0.00 | 0.09 | 0.04 |
| **Pa** | 0.73 | 0.44 | 0.42 | 0.66 | 0.56 | 0.65 | 0.58 | 0.42 | 0.53 | 0.67 | 0.57 | 0.52 | 0.42 | 0.73 | 0.56 |
| **mBd** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.03 | 0.01 | 0.01 | 0.00 | 0.03 | 0.01 |
| **rBd** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.02 | 0.01 | 0.00 | 0.02 | 0.00 |
| **Pro** | 0.03 | 0.02 | 0.03 | 0.03 | 0.04 | 0.03 | 0.02 | 0.02 | 0.03 | 0.03 | 0.05 | 0.03 | 0.02 | 0.05 | 0.03 |
| **U1-16** | 5.27 | 4.04 | 4.35 | 4.80 | 4.38 | 4.78 | 4.75 | 3.58 | 4.31 | 4.90 | 4.21 | 4.44 | 3.58 | 5.27 | 4.48 |

Acronyms: F—Fructose; G—Glucose; Gb—Gentiobiose; Ima—Isomaltose; IMu—Isomaltulose; Kb—Kojibiose; Lu—Leucrose; Ma—Maltose; Mu—Maltulose; Ng—Nigerose; Tru—Trehalulose; Tu—Turanose; ααTr—αα-Trehalose; αβTr—αβ-Trehalose; Er—Erlose; 1-Ks—1-Kestose; Mr—Maltotriose; Mz—Melezitose; Pa—Panose; mBd—meso-2,3butanediol; rBd—racemic 2,3butanediol; Pro—Proline; U—Unknown.

Table S2a. Chemical composition of the propolis of *Scaptortigona mexicana* (GC-MS after silylation; %TIC). samples 1 -12

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Compound** | **Mex1** | **Mex2** | **Mex3** | **Mex4** | **Mex5** | **Mex6** | **Mex7** | **Mex8** | **Mex9** | **Mex10** | **Mex11** | **Mex12** |
| ***Sugar alcohols*** | **2.9** | **6.8** | **2.0** | **2.1** | **4.8** | **1.3** | **1.9** | **0.5** | **9.5** | **8.3** | **1.3** | **0.4** |
| Glycerol | 1.9 | 2.1 | 1.4 | 1.5 | 3.0 | 0.8 | 1.2 | 0.3 | 6.3 | 4.3 | 0.5 | 0.3 |
| Arabitol  | 1.0 | 4.3 | 0.6 | 0.5 | 1.2 | 0.5 | 0.7 | 0.2 | 2.6 | 2.7 | 0.8 | 0.1 |
| Pinitol  | - | Tr. | Tr. | Tr. | 0.4 | Tr. | Tr. | - | 0.3 | 0.6 | Tr. | - |
| Mannitol  | - | 0.4 | - | 0.1 | 0.2 | Tr. | Tr. | - | 0.3 | 0.7 | Tr. | Tr. |
| ***Phenolic acids*** | **0.3** | **0.3** | **Tr.** | **0.3** | **0.2** | **Tr.** | **Tr.** | **0.2** | **1.1** | **1.5** | **Tr.** | **0.1** |
| Hydroxybenzoic acid | Tr. | 0.1 | Tr. | 0.1 | Tr. | Tr. | Tr. | 0.2 | 0.8 | 0.2 | Tr. | Tr. |
| Hydroxyphenyl acetic | 0.3 | Tr. | Tr. | 0.2 | 0.2 | Tr. | Tr. | Tr. | 0.3 | 1.3 | Tr. | 0.1 |
| *p*-coumaric acid | Tr. | 0.2 | - | Tr. | - | - | Tr. | - | - | - | - | - |
| caffeic acid | - | Tr. | - | - | - | - | - | - | - | - | - | - |
| ***Diterpenes*** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **1.2** | **-** |
| Kaurenal | - |  |  |  |  |  |  |  |  |  |  |  |
| Kaurenol | - |  |  |  |  |  |  |  |  |  |  |  |
| Kaurenoic acid | - | - | - | - | - | - | - | - | - | - | 1.0 | - |
| Hydroxucaurenoic acid | - | - | - | - | - | - | - | - | - | - | Tr. | - |
| Acetoxycaurenoic acid | - | - | - | - | - | - | - | - | - | - | 0.2 | - |
| ***Cardanols*** | **1.3** | **0.6** | **1.4** | **0.3** | **Tr.** | **Tr.** | **0.3** | **0.2** | **Tr.** | **Tr.** | **0.4** | **Tr.** |
| Cardanol 17(2) | 0.4 | 0.4 | 0.4 | 0.2 | Tr. | Tr. | 0.2 | 0.2 | Tr. | Tr. | 0.2 | Tr.. |
| Cardanol 17(1) | 0.1 | 0.2 | 0.2 | 0.1 | Tr. | Tr. | 0.1 | Tr. | Tr. | Tr. | 0.2 | Tr. |
| Cardanol 19(1) | 0.8 | Tr. | 0.8 | Tr. | - | Tr. | Tr. |   | Tr. | Tr. | Tr. | Tr. |
| ***Cardols*** | **19.3** | **12.6** | **18.4** | **9.5** | **3.6** | **5.9** | **13.3** | **13.2** | **6.3** | **2.7** | **14.2** | **2.9** |
| Cardol 15(1) | 0.6 | 0.7 | 0.5 | 0.2 | Tr. | 0.2 | 0.4 | 0.3 | 0.3 | 0.1 | 0.9 | 0.2 |
| Cardol 15 | 1.4 | 1.2 | 1.5 | 0.7 | 0.3 | 0.5 | 1.1 | 1.0 | 0.6 | 0.2 | 0.1 | Tr. |
| Cardol 17(2) | 7.0 | 5.0 | 8.4 | 3.6 | 1.1 | 1.9 | 5.4 | 5.1 | 2.0 | 0.8 | 5.0 | 0.8 |
| Cardol 17(1) | 1.3 | 0.7 | 1.1 | 0.6 | 0.2 | 0.5 | 1.1 | 0.9 | 0.5 | 0.2 | 0.7 | 0.2 |
| Cardol 17(1) isom. | 1.3 | 0.8 | 1.4 | 0.6 | 0.3 | 0.4 | 0.9 | 0.9 | 0.4 | 0.2 | 0.9 | 0.3 |
| Cardol 17(1) isom | 4.5 | 2.7 | 4.8 | 2.5 | 0.9 | 1.3 | 3.9 | 3.3 | 1.7 | 0.8 | 3.7 | 0.8 |
| Cardol 17. | 0.2 | Tr. | Tr. | Tr. | 0.2 | 0.3 | 0.2 | Tr.  | 0.1 | Tr. | 0.3 | Tr. |
| Carol 19(1) | 3.0 | 1.5 | 0.4 | 1.3 | 0.6 | 0.8 | 0.3 | 1.7 | 0.7 | 0.4 | 2.6 | 0.6 |
| ***Lignans*** | **-** | **-** | **-** | **-** |  |  |  |  |  |  | **0.8** |  |
| Dihydrocubebin  | - | - | - | - | - | - | - | - | - | - | 0.8 | - |
| 3.4-methylenedioxy secoisolariciresinol | - |  |  | - |  |  |  |  |  |  |  |  |
| ***Anacardic acids*** | **2.6** | **4.0** | **8.4** | **3.1** | **1.2** | **1.7** | **5.5** | **5.1** | **1.9** | **1.0** | **5.7** | **1.4** |
| AA C15 | 0.2 | 0.1 | 0.5 | 0.2 | Tr. | 0.1 | 0.4 | 0.4 | 0.2 | Tr. | 0.4 | Tr. |
| AA15(2) | 1.2 | 1.8 | 3.3 | 1.2 | 0.4 | 0.6 | 2.1 | 2.0 | 0.7 | 0.4 | 2.0 | 0.4 |
| AA15(1) | 1.2 | 1.2 | 1.9 | 1.0 | 0.4 | 0.6 | 1.8 | 1.5 | 0.7 | 0.4 | 1.7 | 0.4 |
| AA 17(1) |  | 0.9 | 2.7 | 0.7 | 0.4 | 0.4 | 1.2 | 1.2 | 0.3 | 0.2 | 1.6 | 0.6 |
| ***Triterpenes ursan/oleanane type*** | **10.6** | **8.1** | **11.9** | **19.0** | **13.1** | **20.8** | **12.0** | **17.9** | **12.4** | **12.7** | **10.8** | **14.7** |
| β-amyrenone | 0.8 | 0.1 | 0.3 | 1.4 | 0.7 | 2.1 | 1.0 | 1.0 | 1.4 | 1.4 | 0.1 | 1.6 |
| β-amyrin | 4.1 | 3.0 | 3.6 | 4.4 | 2.9 | 3.7 | 3.2 | 4.7 | 3.6 | 2.3 | 3.3 | 2.7 |
| α-amyrenone | 1.2 | 0.9 | 1.2 | 3.0 | 1.4 | 5.6 | 2.4 | 2.4 | 1.0 | 3.0 | 1.0 | 3.5 |
| α-amyrin | 4.5 | 3.8 | 6.8 | 7.9 | 4.8 | 4.6 | 3.4 | 8.3 | 4.4 | 3.0 | 5.3 | 3.3 |
| Amyrin acetate | - | 0.3 | - | 2.3 | 3.3 | 4.8 | 2.0 | 1.5 | 2.0 | 3.0 | 1.1 | 3.6 |
| ***Triterpenes cycloartane type*** | **16.4** | **13.2** | **16.5** | **16.1** | **10.1** | **12.6** | **15.3** | **15.6** | **9.0** | **8.7** | **14.9** | **11.5** |
| cycloartenol | 7.5 | 5.7 | 5.4 | 8.2 | 6.1 | 7.6 | 5.4 | 6.2 | 5.7 | 4.9 | 5.4 | 6.1 |
| Mangiferolic acid | 1.7 | 1.6 | 2.2 | 2.0 | 1.3 | 1.6 | 2.5 | 2.4 | 0.7 | 1.3 | 2.5 | 2.2 |
| Isomaniferolic acid | 7.2 | 5.9 | 8.9 | 5.9 | 2.7 | 3.4 | 7.4 | 7.0 | 2.6 | 2.5 | 7.0 | 3.2 |
| ***Others*** |  |  |  |  |  |  |  |  |  |  |  |  |
| ethylamine | 1.0 | 1.1 | 3.2 | 1.0 | 0.9 | 0.2 | 1.5 | 1.1 | 1.2 | 2.7 | 1.1 | 0.8 |
| Quinic acid | - |  |  |  |  |  |  |  |  |  |  |  |
| Quinic acid (Isomer) | - |  |  |  |  |  |  |  |  |  |  |  |

Table S2b. Chemical composition of the propolis of *Scaptortigona mexicana* (GC-MS after silylation; %TIC). samples 1 -12

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Compound** | **Mex13** | **Mex14** | **Mex15** | **Mex16** | **Mex17** | **Mex18** | **Mex19** | **Mex20** | **Mex21** | **Mex22** | **Mex23** | **Mex24** |
| ***Sugar alcohols*** | **1.1** | **0.7** | **0.6** | **1.0** | **0.8** | **0.6** | **2.1** | **1.7** | **1.5** | **3.1** | **5.6** | **1.2** |
| Glycerol | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.4 | 1.4 | 1.0 | 0.8 | 1.7 | 1.5 | 1.0 |
| Arabitol  | 0.4 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.6 | 0.7 | 0.7 | 1.3 | 1.1 | 0.2 |
| Pinitol  |  |  |  |  |  |  | 0.1 |  |  | 0.1 | Tr. |  |
| ***Phenolic acids*** | **0** | **0** | **0** | **0** | **0** | **0** | **0.2** | **0** | **0** | **0** | **0.2** | **0** |
| *p*-coumaric acid |  |  |  |  |  |  | 0.2 |  |  |  |  |  |
| ***Diterpenes*** | **47.1** | **14.5** | **39** | **21.8** | **44.7** | **32.4** | **31.9** | **37.5** | **27.1** | **34.1** | **23.3** | **29.2** |
| Kaurenal | 2.2 | 0.6 | 1.4 | 0.7 | 1.1 | 1.0 | 1.0 | 1.2 | 0.8 | 1.2 | 0.7 | 1.0 |
| Kaurenol | 4.3 | 1.2 | 2.9 | 1.2 | 2.6 | 2.1 | 2.0 | 2.8 | 1.7 | 2.6 | 1.4 | 1.9 |
| Kaurenoic acid | 32.6 | 9.1 | 26.3 | 14.9 | 27.4 | 22.1 | 21.8 | 25.6 | 18.5 | 23.3 | 16.4 | 20.0 |
| Hydroxucaurenoic acid | 1.9 | 0.9 | 1.9 | 1.2 | 2.5 | 1.8 | 1.8 | 1.7 | 1.5 | 1.7 | 1.2 | 1.7 |
| Acetoxycaurenoic acid | 6.1 | 2.7 | 6.5 | 3.8 | 11.1 | 5.4 | 5.2 | 6.2 | 4.6 | 5.3 | 3.6 | 4.6 |
| ***Cardanols*** | **0.3** | **3.6** | **1.8** | **2.1** | **1.6** | **2.1** | **1.8** | **1.4** | **2.2** |  |  |  |
| Cardanol 17(2) | Tr. | 0.8 | 0.6 | 0.4 | 05 | 0.7 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 0.6 |
| Cardanol 17(1) | Tr. | 0.7 | 0.2 | 0.5 | 0.6 |  | 0.6 | 0.4 | 0.6 | 0.6 | 0.5 | 0.7 |
| Cardanol 19(1) | - | - | - | - | - | - | - | 0.2 | 0.2 | - | - | 0.2 |
| Cardanol 19(1) | 0.3 | 2.1 | 1.0 | 1.2 | 0.5 | 1.4 | 0.6 | 0.5 | 1.0 | 0.6 | 0.8 | 1.1 |
| ***Cardols*** | **1.4** | **11.5** | **3.6** | **9.9** | **1.5** | **5.4** | **3.6** | **2.6** | **6** | **2.7** | **5.1** | **6** |
| Cardol 15(1) |  | 0.5 | Tr. | 0.3 |  | 0.2 | Tr. | 0.2 | 0.5 | 0.1 | 0.2 | 0.2 |
| Cardol 15 |  | 1.0 | 0.3 | 0.7 |  | 0.4 | 0.2 | 0.2 |  | 0.2 | 0.4 | 0.5 |
| Cardol 17(2) | 0.6 | 4.4 | 1.7 | 4.5 | 0.8 | 2.2 | 1.7 | 1.0 | 3.0 | 1.1 | 2.2 | 2.3 |
| Cardol 17(1)9 | 0.2 | 1.1 | 0.3 | 0.7 | 0.3 | 0.4 | 0.4  | 0.3 | 0.5 |  | 0.4 | 0.5 |
| Cardol 17(1) isom. | 0.2 | 1.0 | 0.3 | 0.6 | 0.2 | 0.4 | 0.4 | 0.2 | 1.4 | 0.3 | 0.4 | 0.6 |
| Cardol 17(1) isom | 0.4 | 3.3 | 1.0 | 3.0 | 0.5 | 1.8 | 0.9 | 0.7 | 0.6 | 0.2 | 1.5 | 1.9 |
| Cardol 17. | Tr. | 0.2 | Tr. | 0.1 | Tr. | Tr. | Tr. | Tr. | Tr. | 0.8 | Tr. | Tr. |
| ***Anacardic acids*** | **Tr.** | **5.1** | **1.5** | **2.4** | **0.4** | **2.3** | **1.2** | **0.8** | **2.2** | **1.6** | **2.0** | **1.4** |
| AA15(2) | Tr. | 1.9 | 0.9 | 1.4 | 0.2 | 0.9 | 0.4 | 0.4 | 1.2 | 0.6 | 0.8 | 0.5 |
| AA15(1) | Tr. | 1.6 | 0.6 | Tr. | 0.1 | 0.8 | 0.6 | 0.3 | 0.8 | 0.6 | 0.7 | 0.5 |
| AA 17(1) | - | 1.3 | - | 1.0 | 0.1 | 0.6 | 0.2 | 0.1 | 0.2 | 0.4 | 0.5 | 0.4 |
| AA C15 | - | 0.3 |  |  |  |  |  |  |  |  |  |  |
| ***Lignans*** | **16.2** | **7.8** | **19.8** | **11.6** | **15.5** | **17.1** | **18.5** | **21.2** | **16.4** | **19.3** | **13.2** | **17.3** |
| Dihydrocubebin  | 15.4 | 7.1 | 18.5 | 10.9 | 23.2 | 16.0 | 17.4 | 19.7 | 15.3 | 18.0 | 12.4 | 16.3 |
| 3.4-methylenedioxy secoisolariciresinol | 0.8 | 0.7 | 1.3 | 0.7 | 2.3 | 1.1 | 1.1 | 1.5 | 1.1 | 1.3 | 0.8 | 1.0 |
| ***Triterpenes ursan/oleanane type*** | **5.1** | **8.7** | **3.3** | **9.4** | **2.3** | **7.7** | **7.9** | **5.2** | **8.4** | **6.2** | **10.9** | **7.8** |
| β-amyrenone | 0.5 | 0.6 | 0.4 | 0.9 | 0.2 | 0.7 | 0.8 | 0.5 | 0.2 | 0.7 | 0.7 | 0.8 |
| β-amyrin | 0.8 | 3.2 | 1.3 | 3.3 | 0.6 | 2.0 | 2.2 | 1.3 | 2.4 | 2.2 | 3.0 | 2.8 |
| α-amyrenone | 1.1 | 1.0 | 0.6 | 1.2 | 0.4 | 1.3 | 0.9 | 0.6 | 1.0 | 0.8 | 1.0 | 0.9 |
| α-amyrin | 2.1 | 3.5 | 1.0 | 4.0 | 0.6 | 2.4 | 2.0 | 1.2 | 2.6 | 1.6 | 3.6 | 3.0 |
| Amyrin acetate | 0.6 | 0.4 | - | - | 0.5 | 1.3 | 2.0 | 1.6 | 2.2 | 0.9 | 2.6 | 0.3 |
| ***Triterpenes cycloartane type*** | **3.6** | **15.1** | **5.0** | **9.3** | **2.1** | **7.1** | **6.8** | **4.6** | **8.5** | **4.8** | **8.9** | **9.6** |
| cycloartenol | 2.6 | 5.1 | 2.3 | 5.8 | 0.9 | 3.4 | 3.7 | 2.8 | 4.1 | 3.2 | 4.8 | 5.1 |
| Mangiferolic acid | 0.4 | 3.8 | 1.1 | 0.8 | 0.5 | 1.4 | 2.0 | 0.6 | 1.6 | 1.6 | 1.4 | 1.6 |
| Isomaniferolic acid | 0.6 | 6.2 | 1.6 | 2.7 | 0.7 | 2.3 | 1.1 | 1.0 | 2.8 |  | 2.7 | 2.9 |
| ***Others*** |  |  |  |  |  |  |  |  |  |  |  |  |
| ethylamine | 1.0 | 0.1 | 1.2 | 1.0 | 1.1 | 1.2  | 1.3 | 1.2 | 1.1 | 1.2 | 1.2 | 1.1 |
| Quinic acid | Tr | 0.3 | 0.8 | 0.3 | 1.1 | 0.5 | 0.7 | 0.6 | 0.5 | 0.7 | 0.5 | 0.7 |
| Quinic acid (Isomer) | 0.8 | 0.4 | 1.1 | 0.6 | 1.5 | 1.0 | 1.0 | 0.9 | 0.8 | 1.1 | 0.7 | 1.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Table S3. Total phenolic content of *Scaptotrigona mexicana* honey

|  |  |
| --- | --- |
| **Honey sample** | **TPC (mgGAE/100 g)** |
| M1 | 90.9±2.8 |
| M2 | 73.4±0.2 |
| M3 | 80.9±1.5 |
| M4 | 86.4±0.4 |
| M5 | 84.2±0.7 |
| M6 | 73.0±0.8 |
| M7 | 70.5±2.1 |
| M8 | 76.4±1.3 |
| M9 | 72.6±0.4 |
| M10 | 67.0±3.5 |
| M11 | 111.0±1.4 |
| M12 | 72.4±1.2 |
| M13 | 64.6±1.8 |
| M14 | 84.4±1.8 |
| M15 | 67.5±2.1 |
| M16 | 61.5±1.4 |
| M17 | 63.2±2.3 |
| M18 | 64.6±0.4 |
| M19 | 77.2±1.9 |
| M20 | 82.2±3.2 |
| M21 | 88.4±1.8 |
| M22 | 89.8±1.6 |
| M23 | 72.9±1.9 |
| M24 | 81.3±3.3 |

Table S3. DPPH and FRAP for propolis of *Scapottriona mexicana*a

|  |  |  |
| --- | --- | --- |
| **Sample** | **DPPH. %RSA** | **FRAP. µmol/L**  |
| Mex-1 | 7.16 + 0.01 | 178 + 4 |
| Mex-2 | 5.37 + 0.19. | 165 + 9 |
| Mex-3 | 5.34 + 0.27 | 148 + 1 |
| Mex-4 | 4.35 + 0.46 | 173 + 1 |
| Mex-5 | 1.76 + 0.18 | 189 + 9 |
| Mex-6 | 2.05 + 0.19 | 171 + 8 |
| Mex-7 | 4.66 + 0.11 | 172 + 11 |
| Mex-8 | 5.65 + 0.17 | 212 + 10 |
| Mex-9 | 8.50 + 0.29 | 281 + 6 |
| Mex-10 | 3.98 + 0.15 | 186 + 4 |
| Mex-11 | 15.34 + 0.28 | 149 + 3 |
| Mex-12 | 13.27 + 0.07 | 109 + 5 |
| Mex-13 | 17.69 + 0.07 | 345 + 9 |
| Mex-14 | 17.14 + 0.10 | 248 + 4 |
| Mex-15 | 17.47 + 0.17 | 334 + 11 |
| Mex-16 | 8.16 + 0.09 | 275 + 14 |
| Mex-17 | 8.80 + 0.11 | 337 + 3 |
| Mex-18 | 6.97 + 0.09 | 265 + 9 |
| Mex-19 | 6.36 + 0.26 | 247 + 4 |
| Mex-20 | 7.06 + 0.11 | 300 + 9 |
| Mex-21 | 7.69 + 0.33 | 292 + 41 |
| Mex-22 | 7.72 + 0.19 | 289 + 3 |
| Mex-23 | 6.87 + 0.24 | 279 + 2 |
| Mex-24 | 7.02 + 0.33 | 303 + 5 |
| BGb | 17.01 + 0.21 | 411 + 1 |

a Tested concentration 0.1 mg/mL.

b Bulgarian *Apis mellifera* propolis. tested concentration 0.1 mg/mL.