

## Supplementary Information

**Table S1.** Compounds found in propolis fractions obtained by preparative-LC. The identification was performed by LC-HRMS comparing the masses with a homemade database.

| Fractions | Compounds                        | Total Conc.<br>mg/g | Rt     | ms       | m/z      | Ion                             | ppm   |
|-----------|----------------------------------|---------------------|--------|----------|----------|---------------------------------|-------|
| E1–F5     | <b>Phenol</b>                    |                     |        |          |          |                                 |       |
|           | Tyrosol                          |                     | 7.536  | 138.0681 | 156.102  | M NH <sub>4</sub> <sup>+</sup>  | 0.24  |
|           | Caffeic acid                     |                     | 7.891  | 180.0423 | 181.0495 | M H <sup>+</sup>                | −0.24 |
|           | Prenyl caffeate                  |                     | 11.448 | 248.1053 | 249.1126 | M H <sup>+</sup>                | 1.95  |
|           | Ferulic acid methylester         |                     | 11.956 | 208.0739 | 209.081  | M H <sup>+</sup>                | 2.05  |
|           | Isopentyl caffeate               |                     | 15.14  | 250.1217 | 268.1555 | M NH <sub>4</sub> <sup>+</sup>  | 4.75  |
|           | Totarol                          |                     | 17.946 | 286.2283 | 304.2621 | M NH <sub>4</sub> <sup>+</sup>  | −4.81 |
|           | <b>Flavonoids</b>                | 31.1                |        |          |          |                                 |       |
|           | Acacetin                         |                     | 12.901 | 284.0686 | 285.0759 | M H <sup>+</sup>                | 0.43  |
|           | Quercetin                        |                     | 13.139 | 302.0436 | 303.0511 | M H <sup>+</sup>                | 3.1   |
|           | Genistein                        |                     | 13.19  | 270.0533 | 271.0605 | M H <sup>+</sup>                | 1.7   |
|           | Kaempferol                       |                     | 13.537 | 286.0483 | 287.0555 | M H <sup>+</sup>                | 2.22  |
|           | Nareng énine                     |                     | 13.63  | 272.0691 | 273.0763 | M H <sup>+</sup>                | 2.22  |
|           | methyl quercetin                 |                     | 13.772 | 316.0589 | 317.0661 | M H <sup>+</sup>                | 1.77  |
|           | Bis-methylated quercetin         |                     | 14.97  | 330.0751 | 331.0823 | M H <sup>+</sup>                | 3.63  |
|           | Tectochrysin                     |                     | 15.151 | 268.0738 | 269.0812 | M H <sup>+</sup>                | 1.16  |
|           | Pinocembrin                      |                     | 16.016 | 256.0741 | 257.0812 | M H <sup>+</sup>                | 1.78  |
|           | Chrysine                         |                     | 16.124 | 254.0581 | 255.0654 | M H <sup>+</sup>                | 0.92  |
|           | <b>Others</b>                    |                     |        |          |          |                                 |       |
|           | 3-Hydroxy-4-methoxycinnamic acid |                     | 10.021 | 194.0574 | 195.0647 | M H <sup>+</sup>                | −2.48 |
|           | Pinobanksin-3-acetate            |                     | 13.183 | 314.0796 | 315.0869 | M H <sup>+</sup>                | 1.91  |
|           | Methoxy-pinobanksin              |                     | 13.188 | 286.0847 | 287.092  | M H <sup>+</sup>                | 2.26  |
|           | 9-Octadecanoic acid              |                     | 21.2   | 282.2562 | 300.29   | M NH <sub>4</sub> <sup>+</sup>  | 1.36  |
| E1–F5.1   | <b>Phenol</b>                    |                     |        |          |          |                                 |       |
|           | Ferulic acid methylester         |                     | 7.317  | 208.0738 | 226.1074 | M NH <sub>4</sub> <sup>+</sup>  | 1.3   |
|           | Tyrosol                          |                     | 7.528  | 138.0684 | 156.1023 | M NH <sub>4</sub> <sup>+</sup>  | 2.51  |
|           | Caffeic acid                     |                     | 7.881  | 180.0421 | 181.0494 | M H <sup>+</sup>                | −1.09 |
|           | Coumaric acid                    |                     | 9.518  | 164.0473 | 165.0546 | M H <sup>+</sup>                | 0.15  |
|           | 3-OH-4-methoxycinnamic acid      |                     | 10.018 | 194.0578 | 195.0651 | M H <sup>+</sup>                | −0.65 |
|           | Isopentyl caffeate               |                     | 15.139 | 250.1224 | 268.1551 | M NH <sub>4</sub> <sup>4+</sup> | 7.75  |
|           | Prenyl caffeate                  |                     | 15.762 | 248.1058 | 249.113  | M H <sup>+</sup>                | 3.87  |

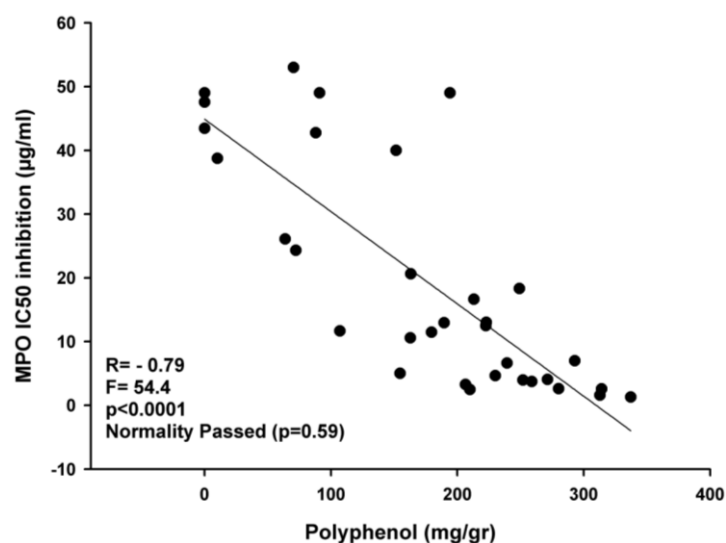
Table S1. Cont.

| Fractions        | Compounds                  | Total Conc.<br>mg/g | Rt     | ms       | m/z      | Ion                            | ppm   |
|------------------|----------------------------|---------------------|--------|----------|----------|--------------------------------|-------|
|                  | <b>Flavonoids</b>          | 4.9                 |        |          |          |                                |       |
|                  | Acacetin                   |                     | 12.916 | 284.0688 | 285.0761 | M H <sup>+</sup>               | 1.05  |
|                  | Quercetin                  |                     | 13.156 | 302.043  | 303.0503 | M H <sup>+</sup>               | 1.1   |
|                  | Genistein                  |                     | 13.221 | 270.0533 | 271.0606 | M H <sup>+</sup>               | 1.76  |
|                  | Kaempferol                 |                     | 13.553 | 286.0483 | 287.0555 | M H <sup>+</sup>               | 1.96  |
|                  | Naring énine               |                     | 13.642 | 272.0691 | 273.0764 | M H <sup>+</sup>               | 2.24  |
|                  | Methyl quercetin           |                     | 13.79  | 316.0586 | 317.0659 | M H <sup>+</sup>               | 1.08  |
|                  | Bis-methylated quercetin   |                     | 14.977 | 330.0746 | 331.0819 | M H <sup>+</sup>               | 2.01  |
|                  | <b>Others</b>              |                     |        |          |          |                                |       |
|                  | Glucose                    |                     | 1.1    | 180.0627 | 203.0519 | M NH <sub>4</sub> <sup>+</sup> | −3.84 |
|                  | Coumaric acid methyl ester |                     | 5.654  | 178.0628 | 196.0966 | M NH <sub>4</sub> <sup>+</sup> | −0.7  |
|                  | Methoxy-pinobanksin        |                     | 13.202 | 286.0845 | 287.0918 | M H <sup>+</sup>               | 1.4   |
|                  | Pinobanksin-3-acetate      |                     | 16.114 | 314.0797 | 315.0869 | M H <sup>+</sup>               | 2.36  |
|                  | 9-Octadecanoic acid        |                     | 21.234 | 282.2567 | 300.2906 | M NH <sub>4</sub> <sup>+</sup> | 3.33  |
| <b>E1-F5.4</b>   | <b>phenol</b>              |                     |        |          |          |                                |       |
|                  | Tyrosol                    |                     | 7.528  | 138.0684 | 156.1022 | M NH <sub>4</sub> <sup>+</sup> | 1.91  |
|                  | Isopentyl caffeate         |                     | 15.152 | 250.1222 | 268.1553 | M NH <sub>4</sub> <sup>+</sup> | 6.7   |
|                  | Prenyl caffeate            |                     | 15.769 | 248.1053 | 249.1126 | M H <sup>+</sup>               | 2.11  |
|                  | Caffeic acid               |                     | 7.891  | 180.0421 | 181.0493 | M H <sup>+</sup>               | −1.35 |
|                  | <b>Flavonoids</b>          | 5.0                 |        |          |          |                                |       |
|                  | Pinocembrin                |                     | 16.028 | 256.0744 | 257.0817 | M H <sup>+</sup>               | 3.27  |
|                  | Pinobanksin-3-acetate      |                     | 16.108 | 314.0791 | 315.0864 | M H <sup>+</sup>               | 0.23  |
|                  | Bis-methylated quercitine  |                     | 16.136 | 330.0736 | 331.0809 | M H <sup>+</sup>               | −0.86 |
|                  | Chrysin                    |                     | 16.509 | 254.0583 | 255.0654 | M H <sup>+</sup>               | 1.7   |
|                  | genistein                  |                     | 16.905 | 270.0535 | 271.0607 | M H <sup>+</sup>               | 2.45  |
|                  | <b>Others</b>              |                     |        |          |          |                                |       |
|                  | Pimaric acid               |                     | 19.339 | 302.2257 | 303.2329 | M H <sup>+</sup>               | 3.49  |
|                  | 9-Octadecanoic acid        |                     | 21.259 | 282.2569 | 300.2907 | M NH <sub>4</sub> <sup>+</sup> | 3.83  |
| <b>E1-F7.1.1</b> | <b>phenol</b>              |                     |        |          |          |                                |       |
|                  | Tyrosol                    |                     | 7.514  | 138.0688 | 156.1026 | M NH <sub>4</sub> <sup>+</sup> | 4.79  |
|                  | F éulic acid               |                     | 10.554 | 194.058  | 195.0653 | M H <sup>+</sup>               | 0.6   |
|                  | Resveratrol                |                     | 11.367 | 228.0788 | 246.1126 | M NH <sub>4</sub> <sup>+</sup> | −0.84 |
|                  | <b>Flavonods</b>           | 15.4                |        |          |          |                                |       |
|                  | Galangin                   |                     | 14.516 | 270.0534 | 271.0607 | M H <sup>+</sup>               | −2.18 |
|                  | <b>Others</b>              |                     |        |          |          |                                |       |
|                  | 9-Octadecanoic acid        |                     | 21.265 | 282.2563 | 300.2901 | M NH <sub>4</sub> <sup>+</sup> | −1.18 |
| <b>E1-F7.1.2</b> | <b>phenol</b>              |                     |        |          |          |                                |       |
|                  | Tyrosol                    |                     | 7.527  | 138.0683 | 156.1022 | M NH <sub>4</sub> <sup>+</sup> | 1.73  |
|                  | Isopentyl caffeate         |                     | 15.162 | 250.121  | 268.1548 | M NH <sub>4</sub> <sup>+</sup> | 1.91  |

Table S1. Cont.

| Fractions | Compounds                 | Total Conc.<br>mg/g | Rt     | ms       | m/z      | Ion                            | ppm   |
|-----------|---------------------------|---------------------|--------|----------|----------|--------------------------------|-------|
| E1-F7.1.3 | <b>Others</b>             |                     |        |          |          |                                |       |
|           | 9-Octadecanoic acid       |                     | 19.243 | 282.2563 | 300.2901 | M NH <sub>4</sub> <sup>+</sup> | 1.73  |
|           | <b>phenol</b>             |                     |        |          |          |                                |       |
|           | Tyrosol                   |                     | 7.32   | 138.0687 | 156.1025 | M NH <sub>4</sub> <sup>+</sup> | 4.05  |
|           | Caffeic acid              |                     | 7.891  | 180.0422 | 181.0495 | M H <sup>+</sup>               | −0.29 |
|           | Isopentyl caffeate        |                     | 15.171 | 250.1211 | 268.155  | M NH <sub>4</sub> <sup>+</sup> | 2.51  |
|           | Ferulic acid methylester  |                     | 3.51   | 208.0742 | 209.0815 | M H <sup>+</sup>               | 11.95 |
|           | <b>Flavonoids</b>         | 30.6                |        |          |          |                                |       |
|           | Chrysin                   |                     | 16.517 | 254.0583 | 255.0655 | M H <sup>+</sup>               | 1.38  |
|           | Pinobanksin-3-acetate     |                     | 16.136 | 314.0798 | 315.087  | M H <sup>+</sup>               | 2.39  |
| E1-F7.2   | <b>Others</b>             |                     |        |          |          |                                |       |
|           | Cinnamic acid             |                     | 0.727  | 148.0523 | 166.0861 | M NH <sub>4</sub> <sup>+</sup> | −0.78 |
|           | Ferulic acid methylester  |                     | 11.953 | 208.0742 | 209.0815 | M H <sup>+</sup>               | 3.51  |
|           | Octadecanoic acid         |                     | 18.445 | 282.2563 | 300.2901 | M NH <sub>4</sub> <sup>+</sup> | 1.6   |
|           | Pimaric acid              |                     | 19.329 | 302.2248 | 303.2321 | M H <sup>+</sup>               | 0.69  |
|           | <b>Phenol</b>             |                     |        |          |          |                                |       |
|           | Tyrosol                   |                     | 7.522  | 138.0687 | 156.1025 | M NH <sub>4</sub> <sup>+</sup> | 4.22  |
|           | Totarol                   |                     | 16.878 | 286.2299 | 304.2634 | M NH <sub>4</sub> <sup>+</sup> | 0.73  |
|           | Prenyl caffeate           |                     | 15.982 | 248.1057 | 249.113  | M H <sup>+</sup>               | 3.8   |
|           | <b>Flavonoids</b>         | 0.8                 |        |          |          |                                |       |
| E1-F7.4   | Kaempferol                |                     | 13.537 | 286.0489 | 287.0561 | M H <sup>+</sup>               | 4.05  |
|           | methyl quercetin          |                     | 13.77  | 316.0582 | 317.0655 | M H <sup>+</sup>               | −0.35 |
|           | Genistein                 |                     | 14.471 | 270.0534 | 271.0607 | M H <sup>+</sup>               | 2.39  |
|           | Bis-methylated quercétine |                     | 14.967 | 330.0748 | 331.082  | M H <sup>+</sup>               | 2.62  |
|           | Acacetin                  |                     | 17.14  | 284.0689 | 285.0762 | M H <sup>+</sup>               | 1.53  |
|           | Pinostrobin               |                     | 18.581 | 270.09   | 271.0973 | M H <sup>+</sup>               | 3.12  |
|           | <b>Others</b>             |                     |        |          |          |                                |       |
|           | Pinobanksin-3-acetate     |                     | 16.105 | 314.0787 | 315.0859 | M H <sup>+</sup>               | −1.05 |
|           | Chrysin                   |                     | 16.506 | 254.0584 | 255.0657 | M H <sup>+</sup>               | 1.8   |
|           | Pimaric acid              |                     | 19.361 | 302.2259 | 303.2332 | M H <sup>+</sup>               | 4.28  |
| E1-F7.4   | 9-Octadecanoic acid       |                     | 21.294 | 282.2565 | 300.2903 | M NH <sub>4</sub> <sup>+</sup> | 2.54  |
|           | <b>Phenol</b>             |                     |        |          |          |                                |       |
|           | Tyrosol                   |                     | 7.527  | 138.0685 | 156.1023 | M NH <sub>4</sub> <sup>+</sup> | 3     |
|           | Isopentyl caffeate        |                     | 15.138 | 250.1214 | 268.1553 | M NH <sub>4</sub> <sup>+</sup> | 3.62  |
|           | Totarol                   |                     | 19.412 | 286.2283 | 304.2621 | M NH <sub>4</sub> <sup>+</sup> | −4.88 |
|           | <b>Flavonoids</b>         | 22.3                |        |          |          |                                |       |
|           | Tectochrysin              |                     | 19.03  | 268.0741 | 269.0813 | M H <sup>+</sup>               | 2.18  |
|           | <b>Others</b>             |                     |        |          |          |                                |       |
|           | Pimaric acid              |                     | 19.361 | 302.2253 | 303.2326 | M H <sup>+</sup>               | 2.46  |
|           | 9-Octadecanoic acid       |                     | 21.262 | 282.2563 | 300.2901 | M NH <sub>4</sub> <sup>+</sup> | 1.81  |

**Figure S1.** Regression analysis between the polyphenol content of extracts/fractions and the MPO inhibition activity. Flavonoid content is not correlated with MPO inhibition activity ( $R = -0.04$ ,  $p = 0.82$ ).



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