

**Table S1.** Compounds detected in *Castanopsis* honey by UPLC-Q/TOF-MS and their neutral mass, observed neutral mass, observed  $m/z$ , mass error, observed retention time (RT).

| <b>Compound</b>                      | <b>Neutral mass (Da)</b> | <b>Observed neutral mass (Da)</b> | <b>Observed <math>m/z</math></b> | <b>Mass error (mDa)</b> | <b>Mass error (ppm)</b> | <b>Observed RT (min)</b> | <b>Adducts</b> |
|--------------------------------------|--------------------------|-----------------------------------|----------------------------------|-------------------------|-------------------------|--------------------------|----------------|
| 2-Hydroxybutyric acid                | 104.0473                 | 104.0474                          | 149.0456                         | 0.00                    | 0.10                    | 0.64                     | +HCOO          |
| DL-Proline                           | 115.0633                 | 115.0627                          | 116.0699                         | -0.70                   | -5.80                   | 0.68                     | +H             |
| Phenethylamine                       | 121.0892                 | 121.0885                          | 122.0958                         | -0.60                   | -5.00                   | 2.35                     | +H             |
| 2-Phenylethanol                      | 122.0732                 | 122.0721                          | 123.0794                         | -1.00                   | -8.40                   | 4.19                     | +H             |
| 2-Hydroxybenzyl alcohol              | 124.0524                 | 124.0516                          | 125.0588                         | -0.90                   | -7.00                   | 4.19                     | +H             |
| 5-Hydroxymethylfurfural              | 126.0317                 | 126.031                           | 127.0382                         | -0.70                   | -5.70                   | 1.98                     | +H             |
| Methylenesuccinic acid               | 130.0266                 | 130.0266                          | 129.0193                         | 0.00                    | -0.10                   | 0.63                     | -H             |
| Adenine                              | 135.0545                 | 135.0539                          | 136.0612                         | -0.60                   | -4.30                   | 0.76                     | +H             |
| p-Anisaldehyde                       | 136.0524                 | 136.0517                          | 137.0589                         | -0.80                   | -5.60                   | 4.20                     | +H             |
| p-Hydroxybenzoic acid                | 138.0317                 | 138.0322                          | 137.025                          | 0.50                    | 3.90                    | 4.92                     | -H             |
| Salicylic acid                       | 138.0317                 | 138.0317                          | 137.0244                         | 0.00                    | -0.20                   | 3.21                     | -H             |
| 1-Methyl-2-piperidinecarboxylic acid | 143.0946                 | 143.0939                          | 144.1012                         | -0.70                   | -4.70                   | 1.31                     | +H, +Na        |
| 4-Hydroxyquinoline                   | 145.0528                 | 145.0527                          | 144.0454                         | 0.00                    | -0.30                   | 3.01                     | -H             |
| Isoguanine                           | 151.0494                 | 151.0485                          | 152.0558                         | -0.90                   | -6.10                   | 0.84                     | +H             |

| <b>Compound</b>                          | <b>Neutral mass (Da)</b> | <b>Observed neutral mass (Da)</b> | <b>Observed <i>m/z</i></b> | <b>Mass error (mDa)</b> | <b>Mass error (ppm)</b> | <b>Observed RT (min)</b> | <b>Adducts</b> |
|--|--------------------------|-----------------------------------|----------------------------|-------------------------|-------------------------|--------------------------|----------------|
| 3,4-Dihydroxybenzoic acid                | 154.0266                 | 154.0267                          | 153.0194                   | 0.10                    | 0.60                    | 2.36                     | -H             |
| 2-Propylsuccinic acid                    | 160.0736                 | 160.0754                          | 183.0646                   | 1.80                    | 10.00                   | 0.65                     | +Na            |
| 3-Hydroxy-3-methylpentane-1,5-dioic acid | 162.0528                 | 162.0522                          | 163.0594                   | -0.70                   | -4.00                   | 0.66                     | +H             |
| trans-4-Hydroxycinnamic acid             | 164.0473                 | 164.0463                          | 209.0445                   | -1.00                   | -5.00                   | 4.20                     | +HCOO          |
| 7-Methylguanine                          | 165.0651                 | 165.0658                          | 200.0352                   | 0.70                    | 3.70                    | 4.08                     | +Cl            |
| DL-Phenylalanine                         | 165.0790                 | 165.0783                          | 166.0856                   | -0.70                   | -4.20                   | 1.69                     | +H, +Na        |
| L-Phenylalanine                          | 165.0790                 | 165.0787                          | 164.0714                   | -0.30                   | -1.80                   | 1.62                     | -H             |
| L-3-phenyllactic acid                    | 166.0630                 | 166.0633                          | 167.0705                   | 0.30                    | 1.60                    | 3.35                     | +H             |
| Vanillic acid                            | 168.0423                 | 168.0421                          | 167.0348                   | -0.20                   | -1.00                   | 3.59                     | -H             |
| Gallic acid                              | 170.0215                 | 170.0206                          | 169.0133                   | -1.00                   | -5.70                   | 1.44                     | -H             |
| Shikimic acid                            | 174.0528                 | 174.0526                          | 173.0453                   | -0.30                   | -1.60                   | 0.71                     | -H             |
| Caffeic acid                             | 180.0423                 | 180.0428                          | 179.0355                   | 0.50                    | 2.80                    | 3.70                     | -H             |
| Galactose                                | 180.0634                 | 180.0632                          | 203.0524                   | -0.20                   | -1.10                   | 0.66                     | +Na            |
| Coniferyl alcohol                        | 180.0786                 | 180.0776                          | 181.0849                   | -1.10                   | -5.90                   | 5.29                     | +H             |
| 10-Hydroxy-2-decenoic acid               | 186.1256                 | 186.1273                          | 209.1166                   | 1.80                    | 8.40                    | 4.17                     | +Na            |
| 3-Amino-2-naphthoic acid                 | 187.0633                 | 187.0629                          | 188.0702                   | -0.40                   | -2.20                   | 4.31                     | +H             |

| <b>Compound</b>               | <b>Neutral mass (Da)</b> | <b>Observed neutral mass (Da)</b> | <b>Observed <i>m/z</i></b> | <b>Mass error (mDa)</b> | <b>Mass error (ppm)</b> | <b>Observed RT (min)</b> | <b>Adducts</b> |
|-------------------------------|--------------------------|-----------------------------------|----------------------------|-------------------------|-------------------------|--------------------------|----------------|
| L-Glycyl-L-isoleucine         | 188.1161                 | 188.1183                          | 227.0815                   | 2.20                    | 9.70                    | 8.64                     | +K             |
| Kynurenic acid                | 189.0426                 | 189.0422                          | 190.0494                   | -0.40                   | -2.30                   | 2.87                     | +H, +Na        |
| 5-Hydroxyindole-3-acetic acid | 191.0582                 | 191.0580                          | 190.0507                   | -0.20                   | -1.30                   | 4.27                     | -H             |
| trans-Ferulic Acid            | 194.0579                 | 194.0592                          | 193.0519                   | 1.30                    | 6.60                    | 4.52                     | -H             |
| D-Gluconic acid               | 196.0583                 | 196.0576                          | 219.0468                   | -0.70                   | -3.20                   | 0.66                     | +Na, +K        |
| Syringic acid                 | 198.0528                 | 198.0526                          | 197.0453                   | -0.20                   | -1.10                   | 3.76                     | -H             |
| Sebacate                      | 202.1205                 | 202.1202                          | 201.1129                   | -0.40                   | -1.80                   | 4.74                     | -H             |
| Xanthurenic acid              | 205.0375                 | 205.0372                          | 206.0445                   | -0.30                   | -1.60                   | 3.86                     | +H             |
| 3,4-Dimethoxycinnamic acid    | 208.0736                 | 208.0736                          | 207.0663                   | 0.00                    | 0.00                    | 5.32                     | -H             |
| Polocarpine                   | 208.1212                 | 208.1204                          | 209.1277                   | -0.80                   | -3.60                   | 1.29                     | +H             |
| Harmine                       | 212.0950                 | 212.0940                          | 257.0922                   | -1.00                   | -3.80                   | 3.25                     | +HCOO, -H      |
| 3-Naphth-2-yl-L-alanine       | 215.0946                 | 215.0940                          | 216.1013                   | -0.60                   | -2.90                   | 4.22                     | +H             |
| N-Acetyl-D-mannosamine        | 221.0899                 | 221.0900                          | 244.0792                   | 0.00                    | 0.10                    | 0.68                     | +Na            |
| 2'-Deoxycytidine              | 227.0906                 | 227.0895                          | 227.0900                   | -1.10                   | -4.90                   | 5.40                     | +e             |
| Resveratrol                   | 228.0786                 | 228.0810                          | 287.0949                   | 2.40                    | 8.40                    | 5.20                     | +CH3COO        |
| 2-Dodecenedioic acid          | 228.1362                 | 228.1356                          | 227.1283                   | -0.60                   | -2.40                   | 3.68                     | -H, +HCOO      |
| Dodecanedioic acid            | 230.1518                 | 230.1516                          | 229.1443                   | -0.20                   | -1.10                   | 6.58                     | -H             |

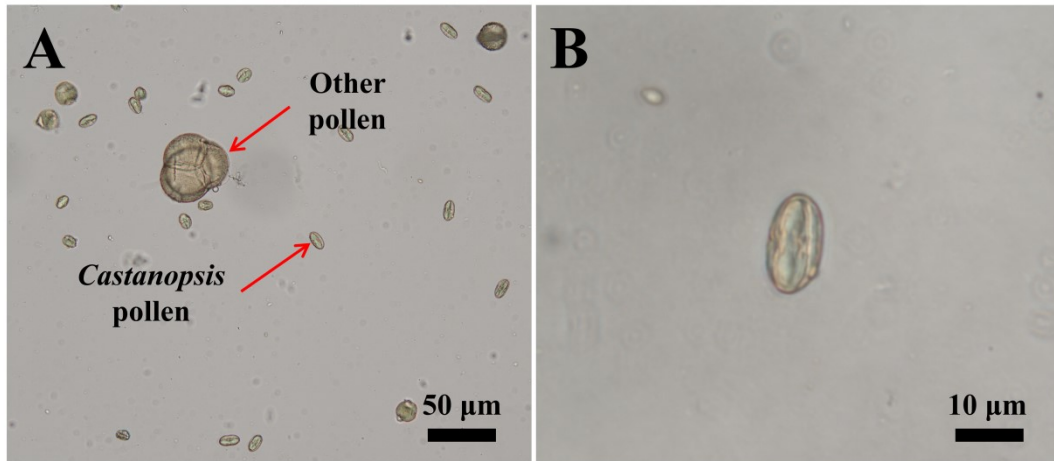
| <b>Compound</b>                    | <b>Neutral mass (Da)</b> | <b>Observed neutral mass (Da)</b> | <b>Observed <i>m/z</i></b> | <b>Mass error (mDa)</b> | <b>Mass error (ppm)</b> | <b>Observed RT (min)</b> | <b>Adducts</b>           |
|------------------------------------|--------------------------|-----------------------------------|----------------------------|-------------------------|-------------------------|--------------------------|--------------------------|
| 3-Deoxyoctulosonic acid            | 238.0689                 | 238.0686                          | 261.0578                   | -0.20                   | -0.90                   | 0.70                     | +Na                      |
| (-)-Huperzine A                    | 242.1419                 | 242.1416                          | 243.1489                   | -0.30                   | -1.30                   | 4.49                     | +H                       |
| 7z,10z,13z-Hexadecatrienoic acid   | 250.1933                 | 250.1914                          | 289.1545                   | -1.90                   | -6.70                   | 3.49                     | +K                       |
| Chrysin                            | 254.0579                 | 254.0576                          | 313.0714                   | -0.30                   | -1.00                   | 7.79                     | +CH <sub>3</sub> COO, -H |
| Daidzein                           | 254.0579                 | 254.0578                          | 253.0505                   | -0.10                   | -0.50                   | 7.49                     | -H                       |
| (+)-Abscisic acid                  | 264.1362                 | 264.1359                          | 265.1432                   | -0.20                   | -0.90                   | 5.29                     | +H, +Na                  |
| Abscisic acid                      | 264.1362                 | 264.1364                          | 263.1291                   | 0.20                    | 0.90                    | 5.51                     | -H, +HCOO                |
| Apigenin                           | 270.0528                 | 270.0530                          | 315.0512                   | 0.20                    | 0.50                    | 6.12                     | +HCOO                    |
| Naringenin                         | 272.0685                 | 272.0683                          | 271.0610                   | -0.20                   | -0.80                   | 6.00                     | -H                       |
| 5,7-Dihydrox -4'-methoxyisoflavone | 284.0685                 | 284.0687                          | 329.0669                   | 0.20                    | 0.60                    | 7.13                     | +HCOO                    |
| Phenethyl caffeate                 | 284.1049                 | 284.1049                          | 283.0976                   | 0.00                    | 0.00                    | 7.77                     | -H                       |
| Fisetin                            | 286.0477                 | 286.0481                          | 285.0408                   | 0.40                    | 1.30                    | 5.51                     | -H                       |
| Kaempferol                         | 286.0477                 | 286.0476                          | 285.0403                   | -0.20                   | -0.60                   | 6.11                     | -H                       |
| Luteolin                           | 286.0477                 | 286.0468                          | 285.0395                   | -0.90                   | -3.30                   | 4.58                     | -H                       |
| 13-HOTrE(r)                        | 294.2195                 | 294.2164                          | 333.1795                   | -3.10                   | -9.30                   | 3.90                     | +K                       |
| 5-Aminoimidazole ribonucleotide    | 295.0569                 | 295.0579                          | 296.0652                   | 0.90                    | 3.20                    | 4.19                     | +H                       |

| <b>Compound</b>                   | <b>Neutral mass (Da)</b> | <b>Observed neutral mass (Da)</b> | <b>Observed <i>m/z</i></b> | <b>Mass error (mDa)</b> | <b>Mass error (ppm)</b> | <b>Observed RT (min)</b> | <b>Adducts</b> |
|-----------------------------------|--------------------------|-----------------------------------|----------------------------|-------------------------|-------------------------|--------------------------|----------------|
| 5'-Deoxy-5'-(methylthio)adenosine | 297.0896                 | 297.0902                          | 320.0794                   | 0.60                    | 1.90                    | 0.84                     | +Na            |
| Kaempferide                       | 300.0634                 | 300.0636                          | 299.0563                   | 0.20                    | 0.60                    | 6.18                     | -H             |
| Ellagic acid                      | 302.0063                 | 302.0065                          | 300.9993                   | 0.30                    | 0.90                    | 4.37                     | -H             |
| Quercetin                         | 302.0427                 | 302.0428                          | 301.0356                   | 0.20                    | 0.60                    | 5.54                     | -H             |
| Hesperetin                        | 302.0790                 | 302.0788                          | 301.0715                   | -0.30                   | -0.90                   | 6.22                     | -H             |
| 13-HpOTrE(r)                      | 310.2144                 | 310.2163                          | 349.1794                   | 1.80                    | 5.30                    | 3.89                     | +K             |
| Myricetin                         | 318.0376                 | 318.0398                          | 317.0326                   | 2.30                    | 7.10                    | 4.96                     | -H             |
| Pinellic Acid                     | 330.2406                 | 330.241                           | 353.2302                   | 0.30                    | 1.00                    | 6.35                     | +Na            |
| 2'-Deoxyinosine-5'-monophosphate  | 332.0522                 | 332.0497                          | 371.0129                   | -2.50                   | -6.70                   | 0.76                     | +K             |
| Camptothecin                      | 348.1110                 | 348.1100                          | 371.0992                   | -1.00                   | -2.70                   | 0.67                     | +Na            |
| Chlorogenic acid                  | 354.0951                 | 354.096                           | 353.0887                   | 0.90                    | 2.60                    | 3.36                     | -H             |
| Geniposidic acid                  | 374.1213                 | 374.1194                          | 413.0826                   | -1.90                   | -4.50                   | 0.67                     | +K             |
| Genistein 7-O-glucoside           | 432.1057                 | 432.1063                          | 477.1045                   | 0.70                    | 1.40                    | 4.53                     | +HCOO          |
| Neoline                           | 437.2777                 | 437.2813                          | 476.2445                   | 3.60                    | 7.50                    | 4.35                     | +K             |
| LysoPC 16:0                       | 495.3325                 | 495.3348                          | 518.3240                   | 2.30                    | 4.40                    | 8.94                     | +Na, +K        |
| Tricoumaroyl spermidine           | 583.2682                 | 583.2679                          | 582.2606                   | -0.30                   | -0.60                   | 5.63                     | -H, +HCOO      |
| Nicotiflorin                      | 594.1585                 | 594.1589                          | 593.1516                   | 0.40                    | 0.70                    | 4.29                     | -H             |

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| <b>Compound</b> | <b>Neutral mass (Da)</b> | <b>Observed neutral mass (Da)</b> | <b>Observed <i>m/z</i></b> | <b>Mass error (mDa)</b> | <b>Mass error (ppm)</b> | <b>Observed RT (min)</b> | <b>Adducts</b> |
|-----------------|--------------------------|-----------------------------------|----------------------------|-------------------------|-------------------------|--------------------------|----------------|
| Rutin           | 610.1534                 | 610.1541                          | 609.1468                   | 0.70                    | 1.10                    | 4.12                     | -H, +Cl        |
| Hesperidin      | 610.1898                 | 610.1884                          | 609.1811                   | -1.40                   | -2.20                   | 4.73                     | -H, +Cl        |
| Nystose         | 666.2219                 | 666.2228                          | 689.2121                   | 1.00                    | 1.40                    | 0.66                     | +Na            |
| Verbascose      | 828.2747                 | 828.2759                          | 851.2651                   | 1.20                    | 1.40                    | 0.66                     | +Na            |

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**Fig. S1.** *Castanopsis* honey palynological analysis. (A) Main pollen in *Castanopsis* honey, (B) *Castanopsis* pollen in *Castanopsis* honey.