

Table S1. Study of the linearity of the relationship between the absorbance and the degree of adulteration for the adulterations made intentionally to honey at 0, 3, 5, 10, 15, 20, 50, and 100% (m/m), with beet, dates and carob syrups. The coefficient of determination closest to 1 is shown in bold.

| Adulteration   |                | Wavenumber (cm <sup>-1</sup> ) |        |        |        |        |        |        |
|----------------|----------------|--------------------------------|--------|--------|--------|--------|--------|--------|
|                | Grade (%; m/m) | 940.0                          | 987.5  | 1049.3 | 1051.4 | 1084.3 | 1086.4 | 1173.0 |
| Beet<br>Syrup  | 0.00           | <b>0.1414</b>                  | 0.3148 | 0.4774 | 0.4778 | 0.3267 | 0.3089 | 0.1098 |
|                | 3.00           | <b>0.1427</b>                  | 0.3153 | 0.4736 | 0.4739 | 0.3236 | 0.3061 | 0.1091 |
|                | 5.00           | <b>0.1435</b>                  | 0.3183 | 0.4746 | 0.4749 | 0.3240 | 0.3064 | 0.1090 |
|                | 10.00          | <b>0.1456</b>                  | 0.3226 | 0.4732 | 0.4733 | 0.3222 | 0.3047 | 0.1084 |
|                | 15.00          | <b>0.1475</b>                  | 0.3362 | 0.4762 | 0.4759 | 0.3213 | 0.3038 | 0.1080 |
|                | 20.00          | <b>0.1492</b>                  | 0.3356 | 0.4748 | 0.4744 | 0.3198 | 0.3025 | 0.1077 |
|                | 50.00          | <b>0.1614</b>                  | 0.3608 | 0.4639 | 0.4627 | 0.3051 | 0.2884 | 0.1038 |
|                | 100.00         | <b>0.1799</b>                  | 0.4044 | 0.4524 | 0.4498 | 0.2834 | 0.2679 | 0.0980 |
| R <sup>2</sup> |                | <b>0.9996</b>                  | 0.9890 | 0.9469 | 0.9611 | 0.9949 | 0.9949 | 0.9980 |

| Adulteration   |                | Wavenumber (cm <sup>-1</sup> ) |               |        |        |        |        |        |
|----------------|----------------|--------------------------------|---------------|--------|--------|--------|--------|--------|
|                | Grade (%; m/m) | 925.6                          | 989.5         | 991.6  | 1030.7 | 1049.3 | 1051.4 | 1150.3 |
| Date<br>Syrup  | 0.00           | 0.1646                         | <b>0.3250</b> | 0.3389 | 0.5499 | 0.4915 | 0.4920 | 0.1897 |
|                | 3.00           | 0.1657                         | <b>0.3272</b> | 0.3405 | 0.5494 | 0.4914 | 0.4921 | 0.1894 |
|                | 5.00           | 0.1663                         | <b>0.3287</b> | 0.3399 | 0.5456 | 0.4889 | 0.4896 | 0.1886 |
|                | 10.00          | 0.1683                         | <b>0.3326</b> | 0.3460 | 0.5417 | 0.4867 | 0.4873 | 0.1874 |
|                | 15.00          | 0.1702                         | <b>0.3370</b> | 0.3483 | 0.5405 | 0.4875 | 0.4879 | 0.1867 |
|                | 20.00          | 0.1709                         | <b>0.3402</b> | 0.3500 | 0.5386 | 0.4864 | 0.4869 | 0.1861 |
|                | 50.00          | 0.1817                         | <b>0.3645</b> | 0.3688 | 0.5129 | 0.4738 | 0.4733 | 0.1781 |
|                | 100.00         | 0.2018                         | <b>0.4040</b> | 0.4052 | 0.4792 | 0.4626 | 0.4607 | 0.1675 |
| R <sup>2</sup> |                | 0.9977                         | <b>0.9999</b> | 0.9964 | 0.9963 | 0.9808 | 0.9839 | 0.9976 |

| Adulteration   |                | Wavenumber (cm <sup>-1</sup> ) |        |        |        |        |        |        |
|----------------|----------------|--------------------------------|--------|--------|--------|--------|--------|--------|
|                | Grade (%; m/m) | 925.8                          | 989.7  | 991.7  | 1020.6 | 1084.5 | 1086.6 | 1129.9 |
| Carob<br>Syrup | 0.00           | <b>0.1620</b>                  | 0.3184 | 0.3253 | 0.5435 | 0.3244 | 0.3067 | 0.1791 |
|                | 3.00           | <b>0.1636</b>                  | 0.3208 | 0.3279 | 0.5373 | 0.3220 | 0.3043 | 0.1796 |
|                | 5.00           | <b>0.1648</b>                  | 0.3239 | 0.3307 | 0.5356 | 0.3216 | 0.3040 | 0.1805 |
|                | 10.00          | <b>0.1677</b>                  | 0.3321 | 0.3389 | 0.5276 | 0.3186 | 0.3012 | 0.1823 |
|                | 15.00          | <b>0.1706</b>                  | 0.3381 | 0.3449 | 0.5200 | 0.3154 | 0.2981 | 0.1839 |
|                | 20.00          | <b>0.1736</b>                  | 0.3446 | 0.3513 | 0.5131 | 0.3131 | 0.2959 | 0.1854 |
|                | 50.00          | <b>0.1915</b>                  | 0.3825 | 0.3882 | 0.4667 | 0.2939 | 0.2777 | 0.1948 |
|                | 100.00         | <b>0.2208</b>                  | 0.4433 | 0.4456 | 0.4015 | 0.2641 | 0.2492 | 0.2117 |
| R <sup>2</sup> |                | <b>1.0000</b>                  | 0.9994 | 0.9989 | 0.9986 | 0.9996 | 0.9996 | 0.9996 |