**Supporting Information**

**Ultrasound-assisted extraction of four groups of *Osmanthus fragrans* fruit: optimization, UPLC-Orbitrap-MS/MS characterization and anti-inflammatory activity evaluation**

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**Figure S9.** ESIMS/MS fragment ions (m/z) of iridoid glucosides identified from the OFA fruit.

**Figure S10.** HPLC-DAD chromatography of OFA fruit by ultrasound-assisted extraction.

A: The chromatogram of mixed nine standards; B: The chromatogram of sample. 1: Salidroside; 2: Acteoside; 3: Neonuezhenide; 4: Nuezhenide; 5: Isoacteoside; 6: G13; 7: Quercetin; 8: Apigenin; 9: Kaempferol. All samples were detected at 210 nm.

**Table S1.** Single-factor experiment results for extraction time of ultrasound-assisted extraction of OFA fruit.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Runs | Ultrasonic time(*X1*, min) | Ethanol concentration (*X2*, %) | Liquid-to- solid ratio (*X3*, mL/g) | Extractionyield |
|  |
| 1 | 10 | 75 | 1:15 | 3.77 |
| 2 | 30 | 75 | 1:15 | 8.33 |
| 3 | 50 | 75 | 1:15 | 12.24 |
| 4 | 70 | 75 | 1:15 | 11.15 |
| 5 | 90 | 75 | 1:15 | 10.55 |

**Table S2.** Single-factor experiment results for ethanol concentration of ultrasound-assisted extraction of OFA fruit.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Runs | Ultrasonic time(*X1*, min) | Ethanol concentration (*X2*, %) | Liquid-to- solid ratio (*X3*, mL/g) | Extractionyield |
|  |
| 1 | 50 | 55 | 1:15 | 10.24 |
| 2 | 50 | 65 | 1:15 | 9.65 |
| 3 | 50 | 75 | 1:15 | 10.17 |
| 4 | 50 | 85 | 1:15 | 9.95 |
| 5 | 50 | 95 | 1:15 | 10.24 |

**Table S3.** Single-factor experiment results for liquid-to- solid ratio of ultrasound-assisted extraction of OFA fruit.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Runs | Ultrasonic time(*X1*, min) | Ethanol concentration (*X2*, %) | Liquid-to- solid ratio (*X3*, mL/g) | Extractionyield |
|  |
| 1 | 50 | 75 | 1:5 | 9.58 |
| 2 | 50 | 75 | 1:10 | 14.27 |
| 3 | 50 | 75 | 1:15 | 13.88 |
| 4 | 50 | 75 | 1:20 | 13.02 |
| 5 | 50 | 75 | 1:25 | 12.82 |

**Table S4**. Quantitative analysis of nine compounds in OFA fruit

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Compound | Salidroside | Acteoside | Isoacteoside | Neonuezhenide | nuezhenide | G13 | Quercetin | Apigenin | Kaempferol |
| Contents (mg/g) | 12.883 | 0.674 | 2.133 | 3.180 | 24.262 | 51.333 | 0.023 | 0.001 | 0.008 |