

SUPPORTING INFORMATION

**Title: Development of a green alternative procedure for simultaneous separation
and quantification of clove oil and its major bioactive constituents**

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3 pages (cover sheet, Figure S1 and Table S1)

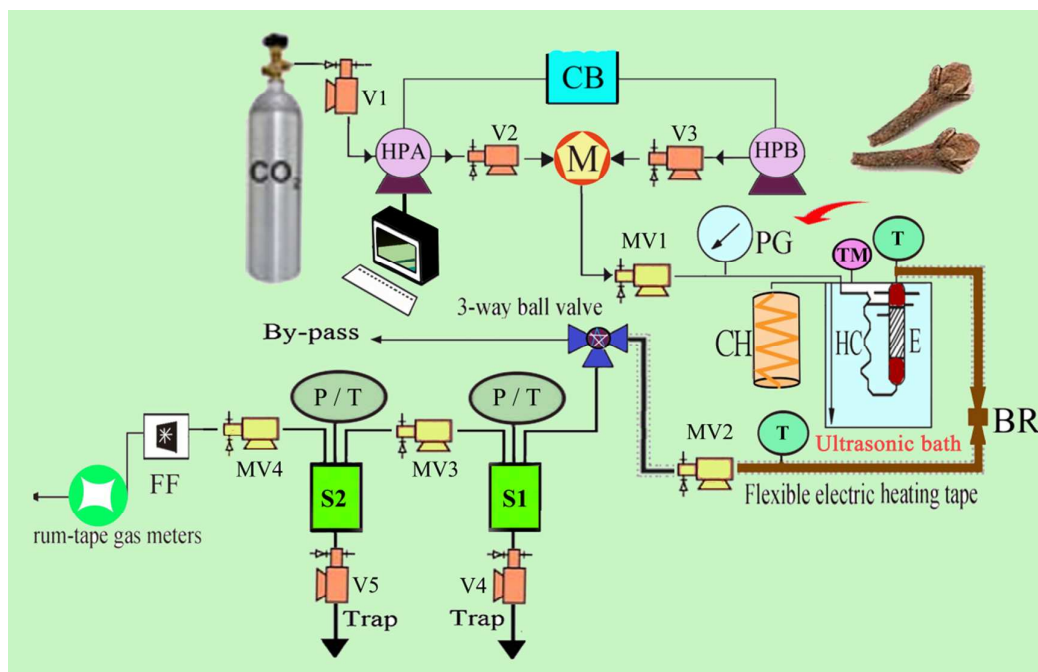


Figure S1. The schematic flow diagram of USC-CO₂ extraction apparatus.

V1–5: stopping valve (on-off valve); HPA, HPB: syringe pump; M: mixer; CB: circulation bath; CH: circulating heater; MV1–4: micro-metering valve; HC: heating coil; E: extraction vessel; PG: pressure gauge; BR: backpressure regulator; FF: float flowmeter; T: thermocouple; TM: mercury-in-glass thermometer.

Table S1. Spline parameters for assays performed at the pressure of 28.5 MPa and temperature of 32°C using a dried clove with a mean particle size of 0.355 mm, used to choose the adequate CO₂ flow rate.

| CO ₂ flow rate (g/min) | t_{CER} (min) | yield _{CER} (g clove oli/g clove (w/w %)) | $Y_{\text{CER}} \times 10^2$ (g clove oil/g CO ₂) |
|--------------------------------------|---------------------------|---|--|
| 0.08 | 111 | 9.03 | 20.68 |
| 0.11 | 89 | 10.45 | 21.34 |
| 0.19 | 75 | 14.79 | 21.35 |
| 0.24 | 63 | 15.58 | 21.54 |
| 0.29 | 52 | 15.49 | 21.84 |
| 0.35 | 46 | 16.05 | 21.88 |
| 0.52 | 41 | 17.54 | 17.09 |
| 0.74 | 35 | 18.17 | 13.59 |