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*Article*

# *Tiliacora triandra* (Colebr.) Diels Leaf Aqueous Extract Inhibits Hepatic Glucose Production in HepG2 cells and Type 2 Diabetic Rats

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**Supplementary Table S1.** Retention time and parameters of calibration curve of standard phenolic and flavonoid compounds for HPLC-PDA method validation.

| Compound | Detected at Wavelength (nm) | RT (min) | Linear Range (μg/mL) | Regression Equation | Correlation Coefficient ($r^2$) |
|---|---|---|---|---|---|
| **Gallic acid** | 280 | 6.45 | 0.5–100 | y = 31428x − 15432 | 0.9999 |
| **Catechin** | 280 | 14.52 | 0.5–100 | y = 7333.4x + 1054.7ǂ | 0.9998 |
| **ECGC** | 280 | 17.63 | 0.5–100 | y = 15109x − 14908 | 0.9993 |
| **EC** | 280 | 18.35 | 0.5–100 | y = 7723.5x + 1562.9 | 0.9999 |
| **Quercetin** | 360 | 28.15 | 0.5–100 | y = 22828x + 3052.2 | 0.9998 |

RT = retention time (min); y = peak area; x = concentration of standard (mg/l); $r^2$ = correlation coefficient of 3 data points in the calibration curve.

**Supplementary Table S2.** Gradient program for the HPLC analysis.

| Times (min) | Solvents (%) | | |
|---|---|---|---|
| | A (0.1 Phosphoric Acid) | B (Methanol) | C (Acetonitrile) |
| 0 | 95 | 0 | 5 |
| 10 | 80 | 10 | 10 |
| 20 | 70 | 15 | 15 |
| 30 | 0 | 0 | 100 |
| 35 | 0 | 0 | 100 |

**Supplementary Table S3.** Primer sequences and expected amplicon sizes for gene amplification.

| cDNA | Forward Primer (5′–3′) | Reverse Primer (5′–3′) | Amplicon Size (bp) |
|---|---|---|---|
| rCu-Zn SOD | GCAGAAGGCAAGCGGTGAAC | TAGCAGGACAGCAGATGAGT′ | 387 |
| rGPx | CTCTCCGCGGTGGCACAGT | CCACCACCGGGTCGGACATAC | 297 |
| rCAT | CCTCCTCGTTCAAGATGTGGTTTTC | CGTGGGTGACCTCAAAGTATCCAAA | 122 |
| rPEPCK | CTCACCTCTGGCCAAGATTGGTA | GTTGCAGGCCCAGTTGTTGA | 190 |
| rG6Pase | AACGTCTGTCTGTCCCGGATCTAC | ACCTCTGGAGGCTGGCATTG | 133 |
| rActin | CCTAAGGCCAACCGTGAAAA | GGAGCGCGTAACCCTCATAG | 181 |
| h Cu-Zn SOD | AAAACACGGTGGGCCAAAG | GTGCGGCCAATGATGCA | 141 |
| hGPx | TTCCCGTGCAACCAGTTTG | TTCACCTCGCACTTCTCGAA | 128 |
| hCAT | TCATATACCTGTGAACTGTC | ATAGAATGACCGCACCTGAG | 229 |
| hPEPCK | AAGAGACACAGTGCCCATCC | ACGTAGGGTGAATCCGTCAG | 201 |
| hG6Pase | GAGACTGGCTCAACCTCGTC | CCTGGTCCAGTCTCACAGGT | 139 |
| hGAPDH | AGCCTTCTCCATGGTGGTGAAGAC | CGGAGTCAACGGATTTGGTCG | 308 |

Cu-Zn SOD-copper zinc superoxide dismutase; GPx-glutathione peroxidase; CAT-catalase; PEPCK-Phosphoenolpyruvate carboxykinase; G6Pase- Glucose 6-phosphatase; GAPDH- Glyceraldehyde 3-phosphate dehydrogenase.