*Supplementary Material*

LC-ESI-QTOF-MS/MS identification and characterization of phenolic compounds from leaves of Australian myrtles and their antioxidant activities













**Figure S1.** Base Peak Chromatograms of aniseed myrtle, cinnamon myrtle, and lemon myrtle in positive and negative modes of ionization (ESI).

*p*-Hydroxybenzoic acid



*p*-Coumaric acid



Gallic acid



Scopoletin



Eriodictyol



Ellagic acid



Quercetin



Procatechuic acid 4-*O*-glucoside



*p*-coumaric acid 4-O-glucoside



Corilagin



Potentillin

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Catechin



Quercetin 3-O-rhamnoside



### Orientin



Myricetin 3-arabinoside



**Figure S3.** MS/MS spectra of some selected compounds identified in leaves of Australian myrtles.

Table S1. LC-MS/MS Quantification of phenolic compounds from Australian myrtles

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. | **Compounds** | **Formula** | **AM (μg/g)** | **LM (μg/g)** | **CM (μg/g)** |
|  | **Phenolic acids** | | | | |
| 1 | Gallic Acid | C7H6O5 | 139.19 ± 8.32 | 202.21 ± 9.87 | 37.11 ± 6.19 |
| 2 | *p*-Hydroxybenzoic acid (*p*-HBA) | C7H6O3 | 15.11 ± 1.15 | 79.13 ± 6.32 | 21.52 ± 3.52 |
| 3 | *p*-Coumaric acid | C9H8O3 | NQ | NQ | 62.08 ± 7.49 |
| 4 | Protocatechuic acid | C7H6O4 | 11.22 ± 2.65 | 24.02 ± 3.39 | 20.51 ± 4.03 |
| 5 | Cinnamic acid | C9H8O2 | 609.08 ± 23.32 | 312.03 ± 21.06 | NQ |
| 6 | Ferulic acid | C10H10O4 | 21.05 ± 1.32 | 87.13 ± 5.14 | NQ |
| 7 | Chlorogenic acid | C16H18O9 | 52.14 ± 3.97 | 66.13 ± 4.06 | 67.92 ± 7.28 |
| 8 | Syringic acid | C9H10O5 | 1135.18 ± 44.56 | 231.01 ± 26.06 | 39.06 ± 6.05 |
| 9 | Caffeic acid | C9H8O4 | 161.12 ± 11.56 | NQ | 13.46 ± 2.81 |
| 10 | Coumaric acid 4-*O*-glucoside | C15H18O8 | 123.17 ± 7.03 | 115.57 ± 9.85 | 84.42 ± 6.03 |
| 11 | Sinapic acid | C11H12O5 | NQ | 199.32 ± 11.84 | NQ |
| **Flavonoids** | | | | | |
| **Catechins and derivatives** | | | | | |
| 12 | Epicatechin | C15H14O6 | 4149.81 ± 115.62 | 3437.16 ± 99.03 | 1244.82 ± 37.32 |
| 13 | (-)-Epicatechin 3-*O*-gallate | C22H18O10 | 131.17 ± 9.73 | 1254.63 ± 76.14 | 322.61 ± 19.24 |
| 14 | Catechin | C15H14O6 | NQ | 4867.14 ± 319.52 | NQ |
| 15 | Epigallocatechin | C15H14O7 | NQ | 235.39 ± 22.93 | 171.46 ± 13.42 |
| 16 | Procyanidin B2 | C30H26O12 | 384.32 ± 17.04 | 1174.14 ± 54.43 | 110.32 ± 8.65 |
| **Flavonols** | | | | | |
| 17 | Isorhamnetin | C16H12O7 | 145.32 ± 9.01 | 223.05 ± 11.19 | NQ |
| 18 | Quercetin | C15H10O7 | 532.21 ± 19.37 | 301.92 ± 16.22 | NQ |
| 19 | Kaempferol | C15H10O6 | 41.03 ± 6.13 | 25.43 ± 2.42 | 24.51 ± 2.09 |
| 20 | Quercetin 3-*O*-rhamnoside | C21H20O11 | NQ | NQ | 101.87 ± 8.84 |
| 21 | Myricetin 3-*O*-arabinoside | C20H18O12 | 943.98 ± 35.19 | NQ | NQ |
| **Flavones** | | | | | |
| 22 | Isovitexin | C21H20O10 | 3206.13 ± 132.07 | 303.87 ± 9.93 | 56.71 ± 7.18 |
| **Tannins** | | | | | |
| 23 | Grandinin | C46H34O30 | 65.16 ± 6.19 | NQ | 154.12 ± 9.37 |
| 24 | 2-*O*-Galloylpunicalin | C41H26O26 | NQ | NQ | 110.21 ± 11.54 |
| 25 | Ellagic acid glucoside | C10H16O13 | 742.02 ± 22.43 | NQ | NQ |
| 26 | Potentillin | C41H28O26 | NQ | NQ | 77.61 ± 6.91 |
| **Other compounds** | | | | | |
| 27 | Pyrogallol | C6H6O3 | 194.35 ± 7.34 | 319.24 ± 29.14 | 26.93 ± 4.08 |

Aniseed myrtle (AM), cinnamon myrtle (CM), lemon myrtle (LM). Not quantified (NQ)