Supplementary material for the article: High resolution UHPLC-MS characterization and isolation of main compounds from the antioxidant medicinal plant *Parastrephia lucida* (Meyen)

Figure S1. HSCCC chromatogram of *P. lepidophylla* ethanolic extract at 254 nm.





Figure S2. ¹H NMR (300 MHz) spectrum of 11-p-coumaroyoxytremetone (peak 35).

Figure S3. ¹³C NMR (100.25 MHz) spectrum of 11-p-coumaroyoxytremetone (peak 35).



Figure S4. HSQC spectrum of 11-p-coumaroyoxytremetone (peak 35).







Figure S6. ¹H NMR (300 MHz) spectrum of s bacchalineol A (peak 42).





Figure S7. ¹³C NMR (100.25 MHz) spectrum of bacchalineol A (peak 42).



Figure S8. HMBC spectrum of bacchalineol A (peak 42).



Figure S9. HSQC spectrum of bacchalineol A (peak 42).



Fig S10. Full HR-MS spectra of peaks 18,19, 24, 28, 32, 35 and 36.









HO



Peak 15: C₁₅H₉O₆⁻ Exp. Mass: 285,05524

Ö

kaempferol

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Peak **41** : $C_{15}H_9O_5^-$

Exp Mass: 269,04550

C).

+OH

.OH



flavonoid

derivatives.

the

Peak 24: $C_{16}H_{11}O_6^{-1}$ Exp. Mass: 299,05618





luteolin



Peak **20**: $C_{15}H_9O_7^-$ Exp. Mass: 301,03549 quercetin





Peak 23: $C_{16}H_{11}O_7^{-1}$ Exp. Mass: 315,05112



Peak 25: C₁₅H₁₁O₅⁻ Exp. Mass: 271,06120

naringenin



Peak 27: C₁₇H₁₃O₇⁻ Exp. Mass: 329,06680



Peak 22: C₁₇H₁₃O₈⁻ Exp. Mass: 345,06183





Exp. Mass: 331,04611





Peak 28: C₁₈H₁₅O₈⁻ Exp. Mass: 359,07742

Fig. S11.



Fig. S12. Proposed biosynthetic relationships for the phenolic acid or coumarin derivatives.