

*Supplementary material*

# Metabolomic Profiling of Antioxidant Compounds in Five *Vachellia* Species

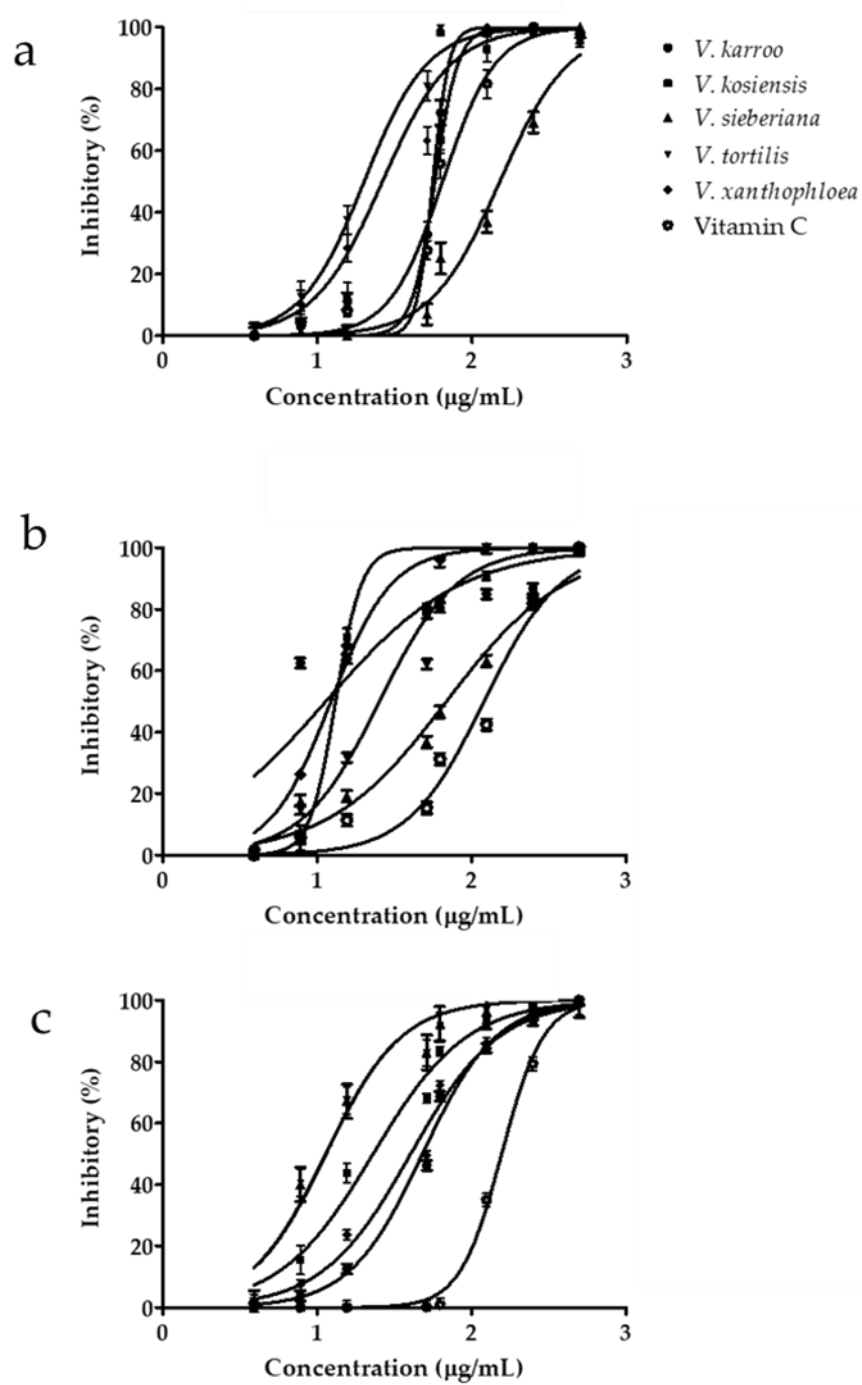
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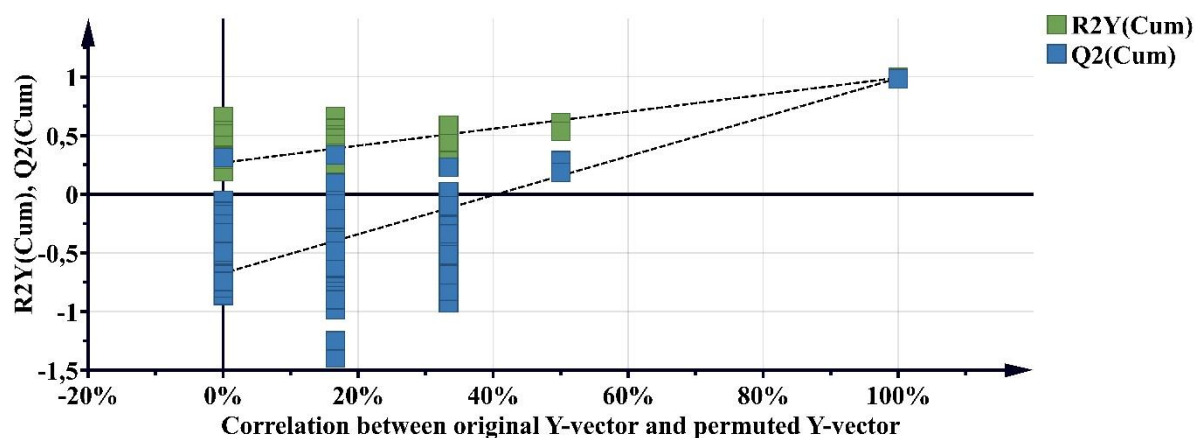
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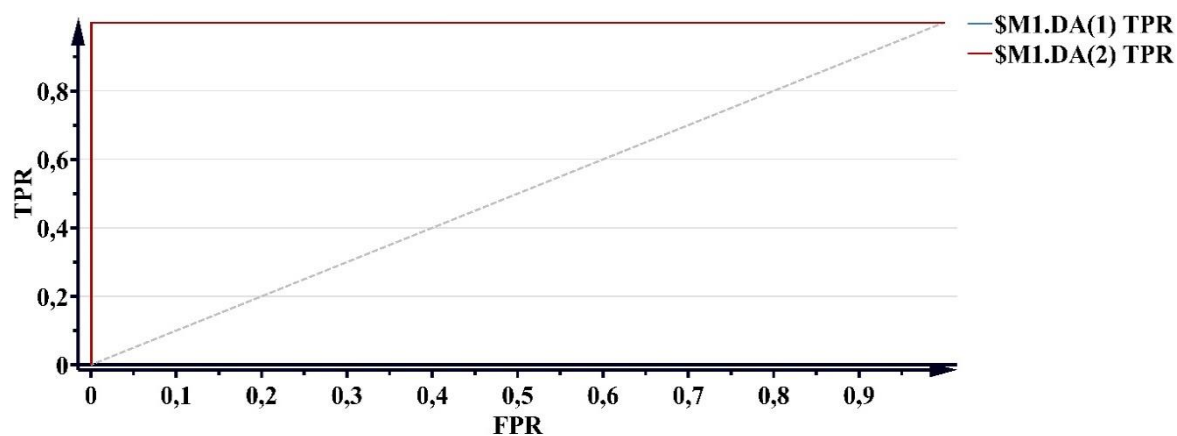
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**Figure S1.** Sigmoidal curved graphs of concentration response of five *Vachellia* extracts against DPPH (a), ABTS (b) and FRAP (c) with  $R^2$  coefficient  $\geq 0.9$ .



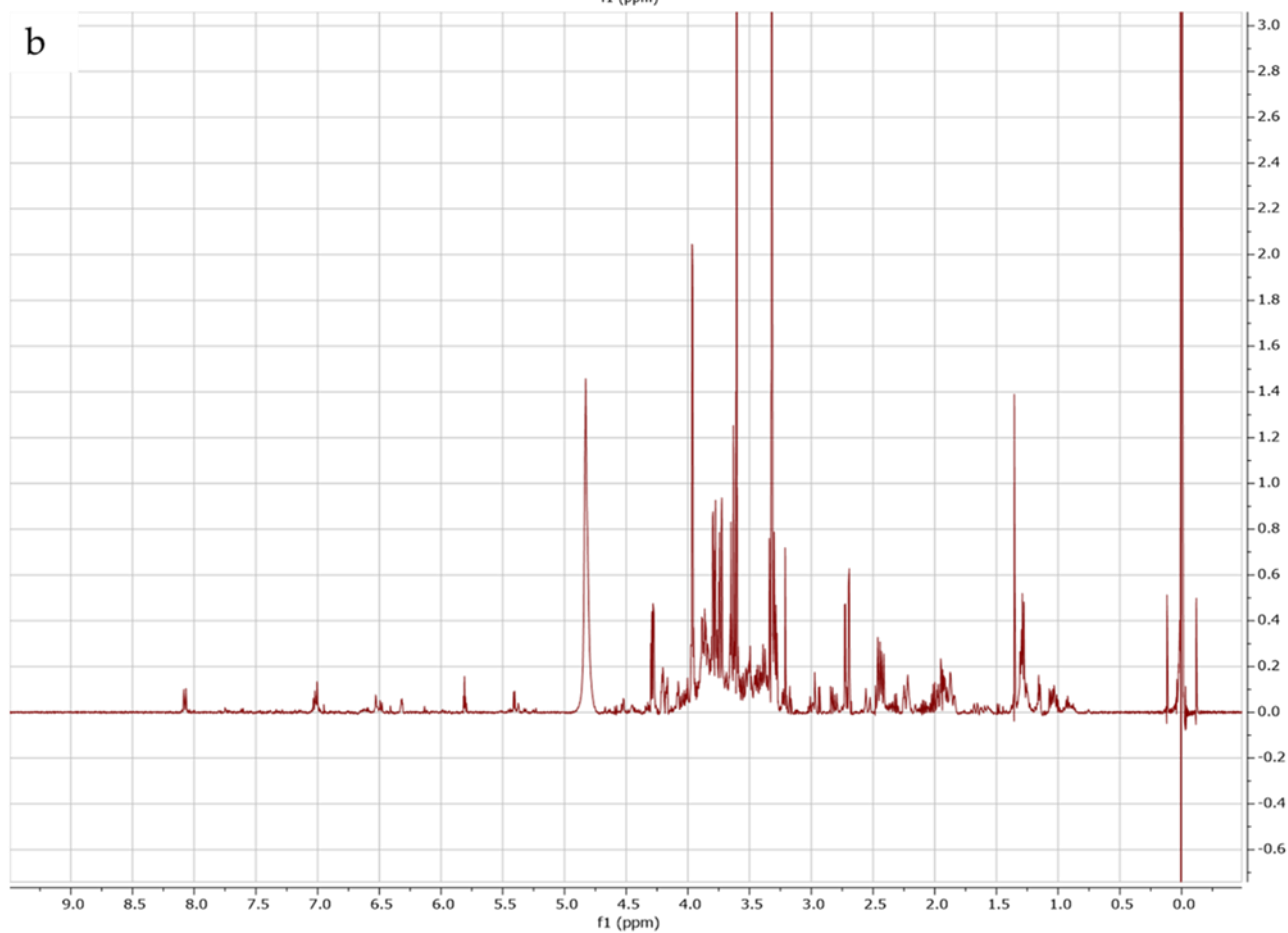
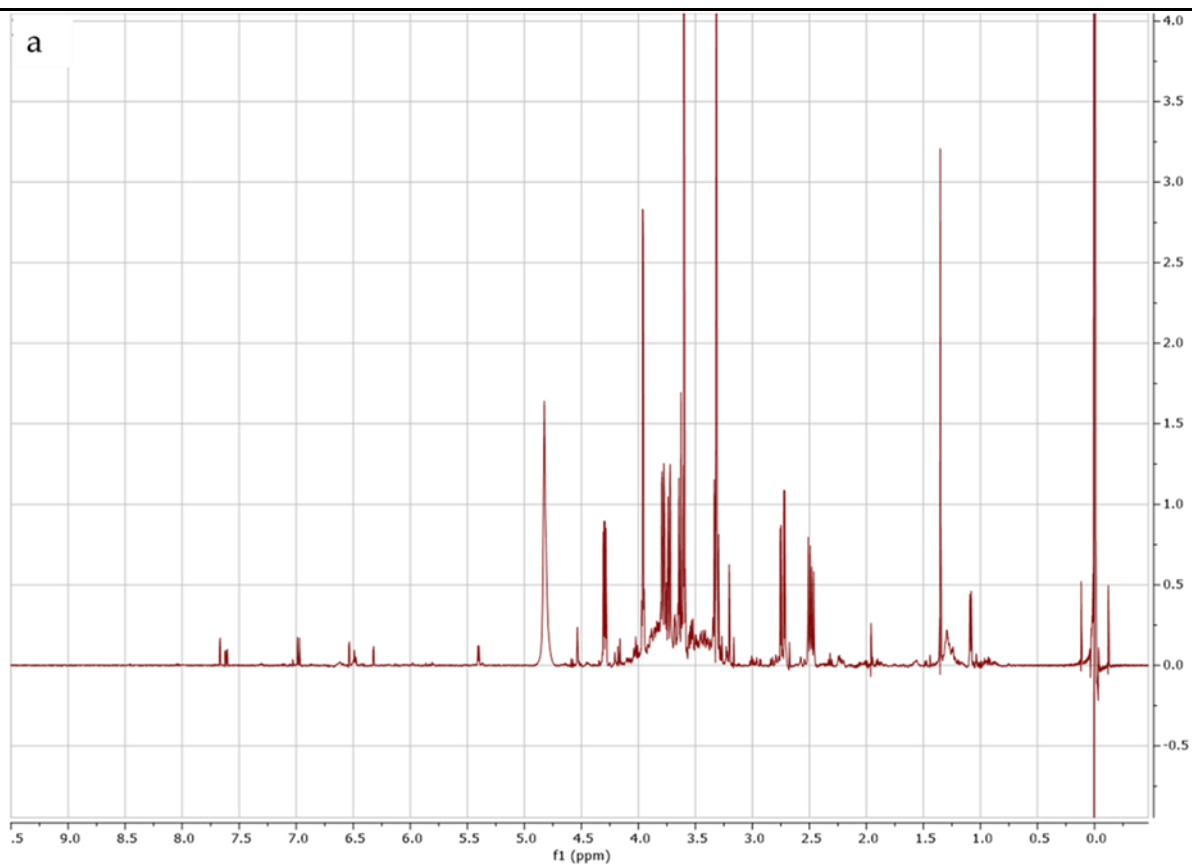
**Figure S2.** The OPLS-DA derived validation plot (permutation times  $n = 100$ ) of *Vachellia* samples showing model intercepts of Intercepts:  $R^2 = (0.0, 0.269)$ ,  $Q^2 = (0.0, -0.674)$ .

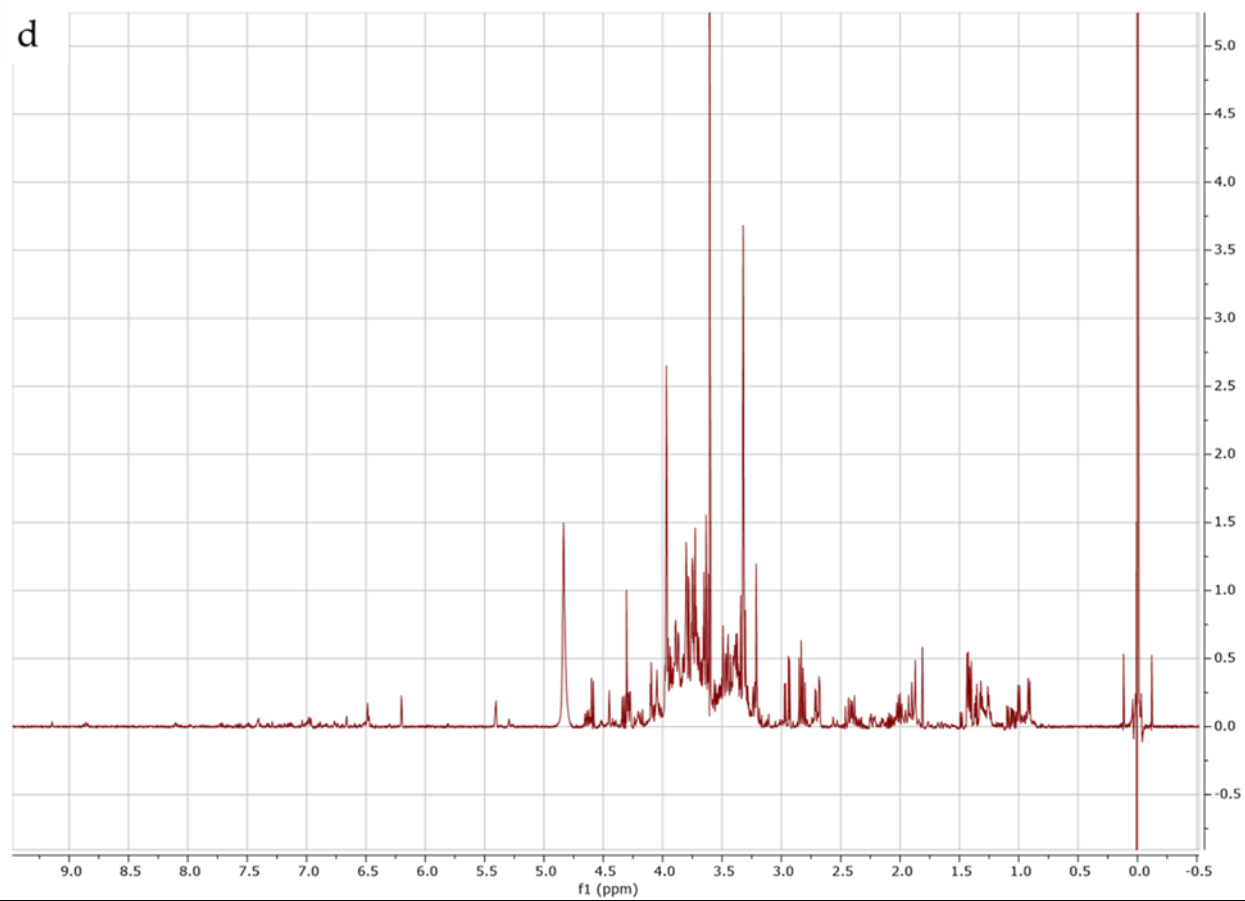
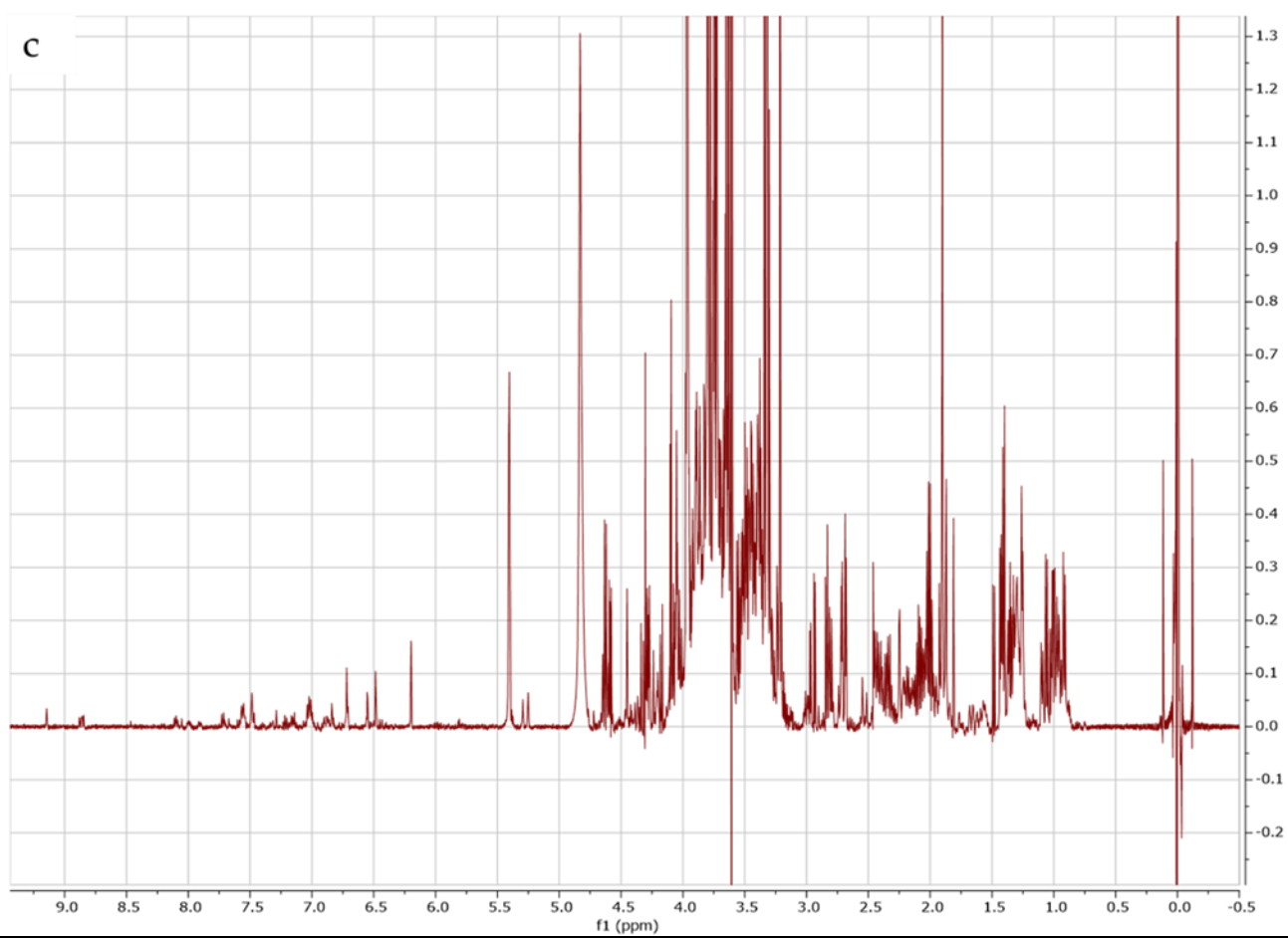


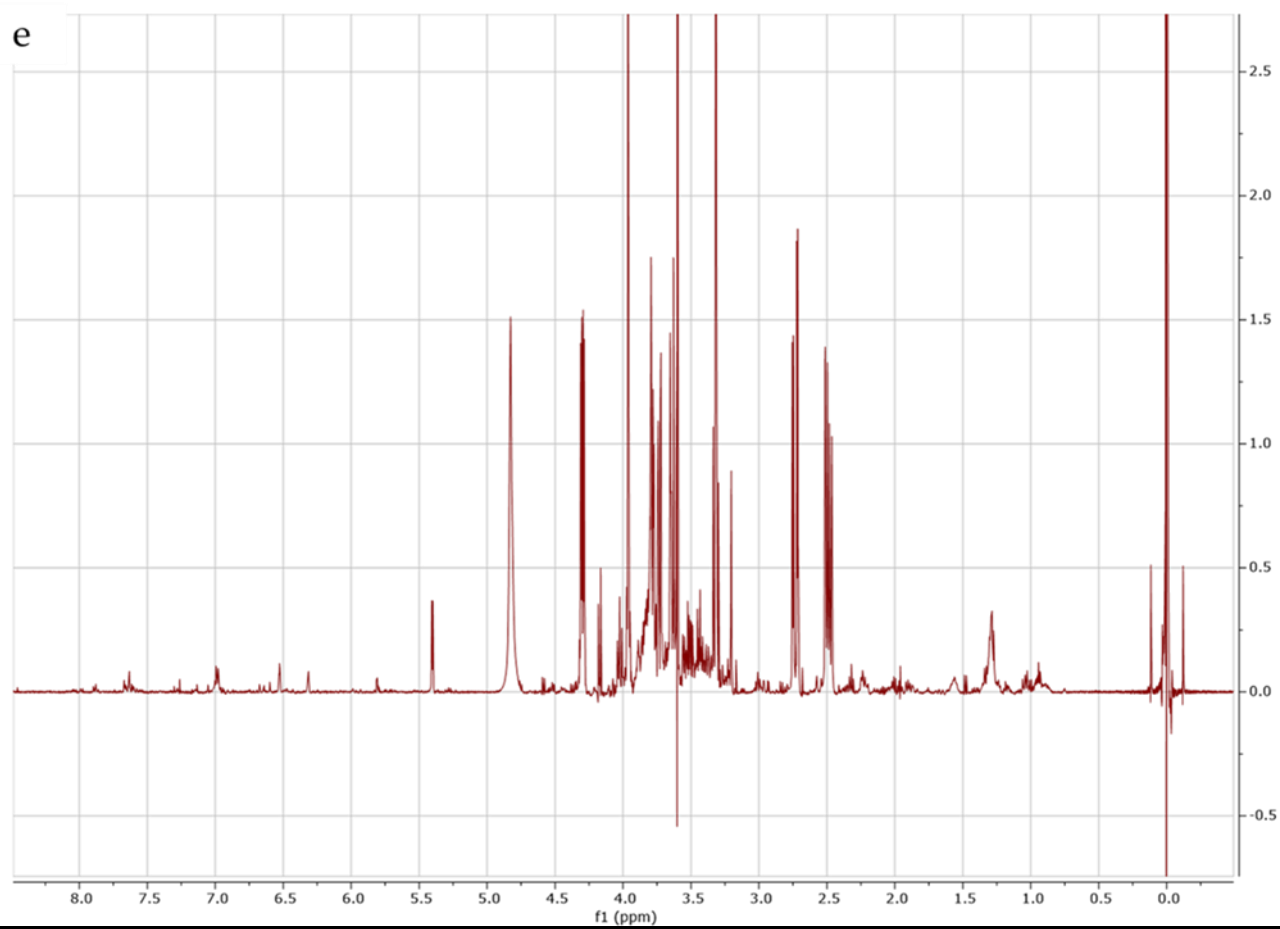
**Figure S3.** A receiver operating characteristic curve (ROC) area under a curve (AUC) plot with predictably accuracy values of 0.994 and 0.945.

**Table S1.** Cross validated ANOVA (CV ANOVA) with a  $p$  value ( $1.23 \times 10^{-16}$ ) of CV ANOVA.

M1(Untitled)	SS	DF	MS	F	p	SD
Total corr.	24	24	1			1
Regression	23,737	6	3,95616	270,732	1,23003e-16	1,98901
Residual	0,263031	18	0,0146128			0,120884







**Figure S4.** Proton nuclear magnetic resonance (<sup>1</sup>H NMR) spectrum of 80 % aqueous-methanol plant extract of *Vachellia karroo* (a), *Vachellia kosiensis* (b), *Vachellia sieberiana* (c), *Vachellia tortilis* (d) and *Vachellia xanthophloea* (e) acquired on a 600 MHz NMR.