Supporting Information

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Bioassay-guided isolation and characterization of wound healer compounds from *Morus nigra* L. (Moraceae)

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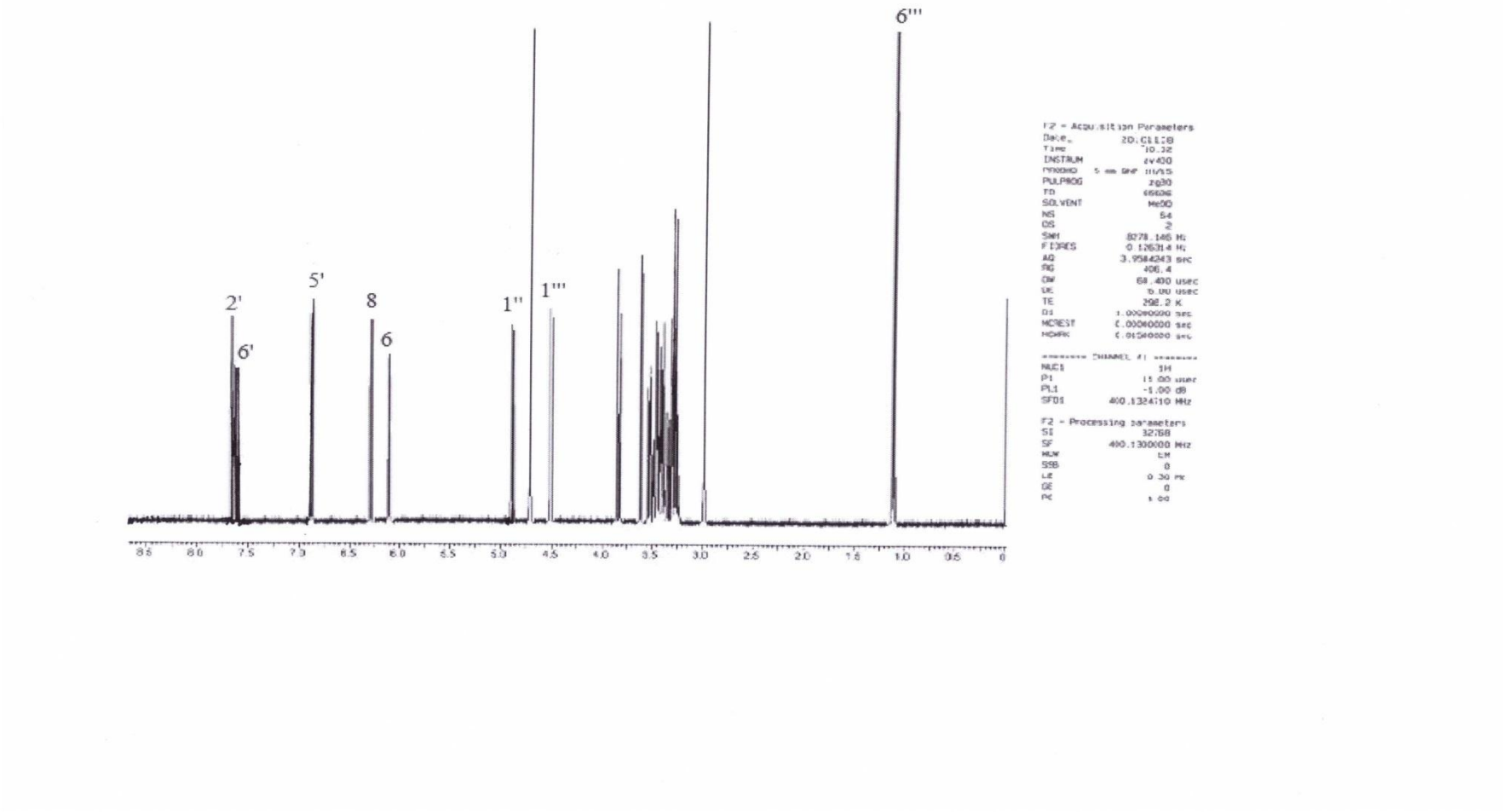
S1: General Considerations

For the identification of the active constituents Nuclear Magnetic Resonance (^{1}H and ^{13}C NMR) and Mass Spectral (MS) techniques were employed. NMR spectra were recorded on a Bruker spectrometer (400 MHz for ^{1}H NMR and 100 MHz for ^{13}C NMR) instrument, using CD_3OD and DMSO-*d6* as solvent. A Finnigan spectrometer was used for FT-MS analyses. The isolated compounds were elucidated as quercetin-3-*O*-rutinoside (**1**) and kaempferol-3-*O*-rutinoside (**2**) respectively, by comparing their spectroscopic data with those of published literatures [1-3].

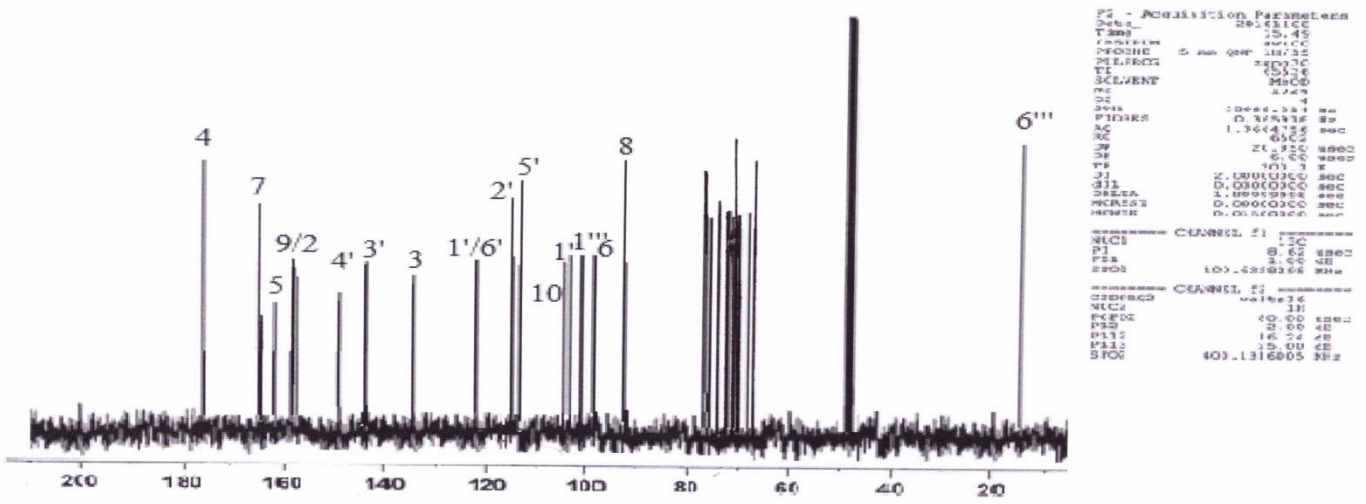
Quercetin-3-*O*-rutinoside (1); FABMS *m/z* (+ve ion mode): 611 $[M+H]^+$ $C_{27}H_{30}O_{16}$, UV (MeOH, λmax, nm): 361; 258

S2: ^{1}H-NMR (400 MHz, CD_3OD) and ^{13}C-NMR (100 MHz, CD_3OD) data of Quercetin-3-*O*-rutinoside

Position	δ_H, ppm (J, Hz)	δ_C, ppm
2	-	158.22
3	-	134.52
4	-	178.39
5	-	162.48
6	6.10 s	99.72
7	-	166.58
8	6.28 s	94.90
9	-	158.91
10	-	105.32
1'	-	122.77
2'	7.64 s	117.37
3'	-	144.32
4'	-	150.23
5'	6.85 d (8.6)	115.46
6'	7.63 d (8.6)	122.47
1"	4.96 d (7.3)	103.63
2"		74.64
3"		77.81
4"	3.20-3.90 m	71.12
5"		78.09
6"		68.37
1"'	4.50 d (1.8)	101.92
2"'		71.32
3"'	3.20-3.90 m	72.13
4"'		73.73
5"'		68.91
6"'	1.12 d (6.0)	18.84



S3: ^{1}H-NMR (400 MHz, CD_3OD) Spectrum of Quercetin-3-*O*-rutinoside (**1**)

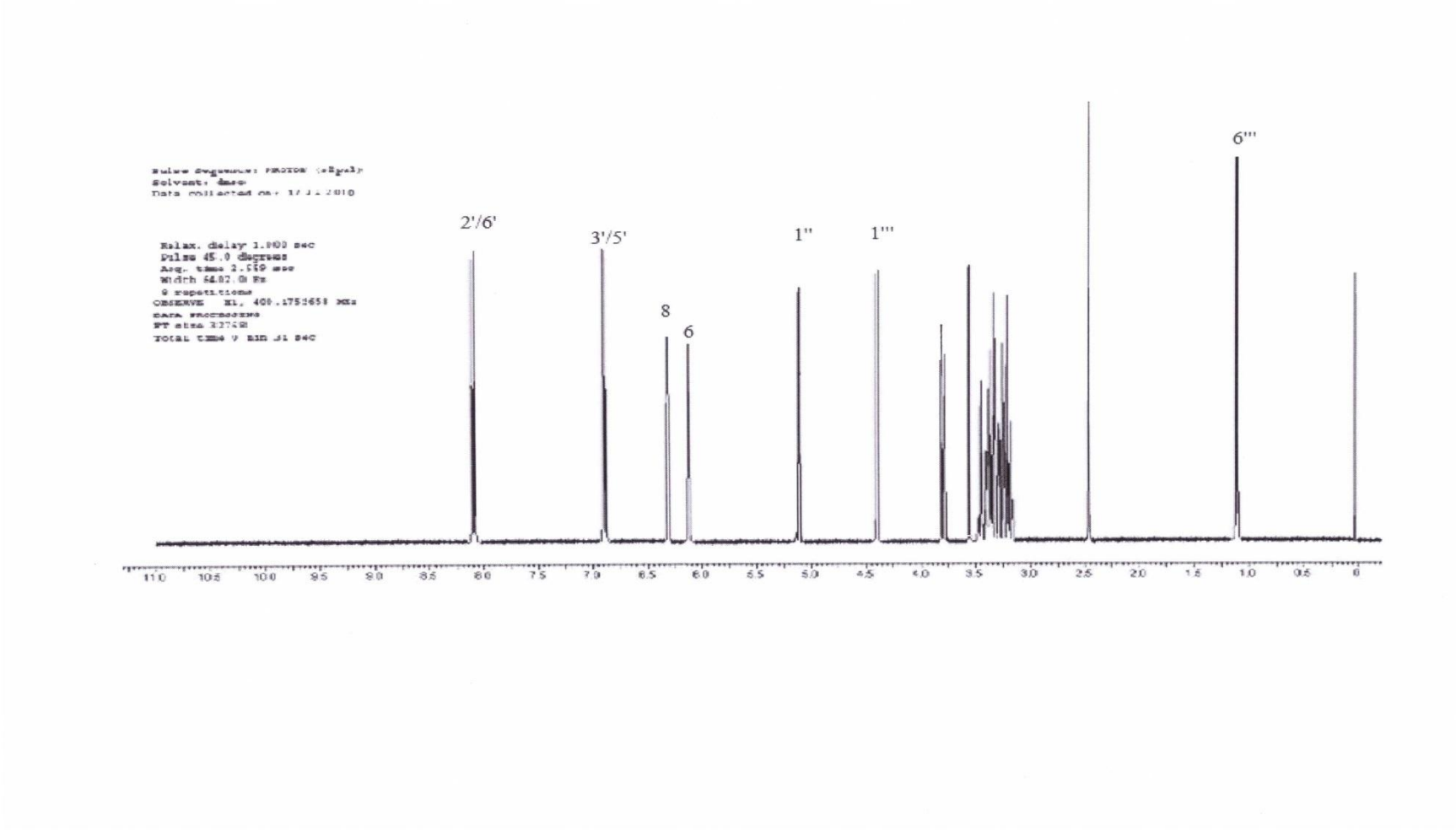


S4: ^{13}C-NMR (100 MHz, CD_3OD) Spectrum of Quercetin-3-*O*-rutinoside (**1**)

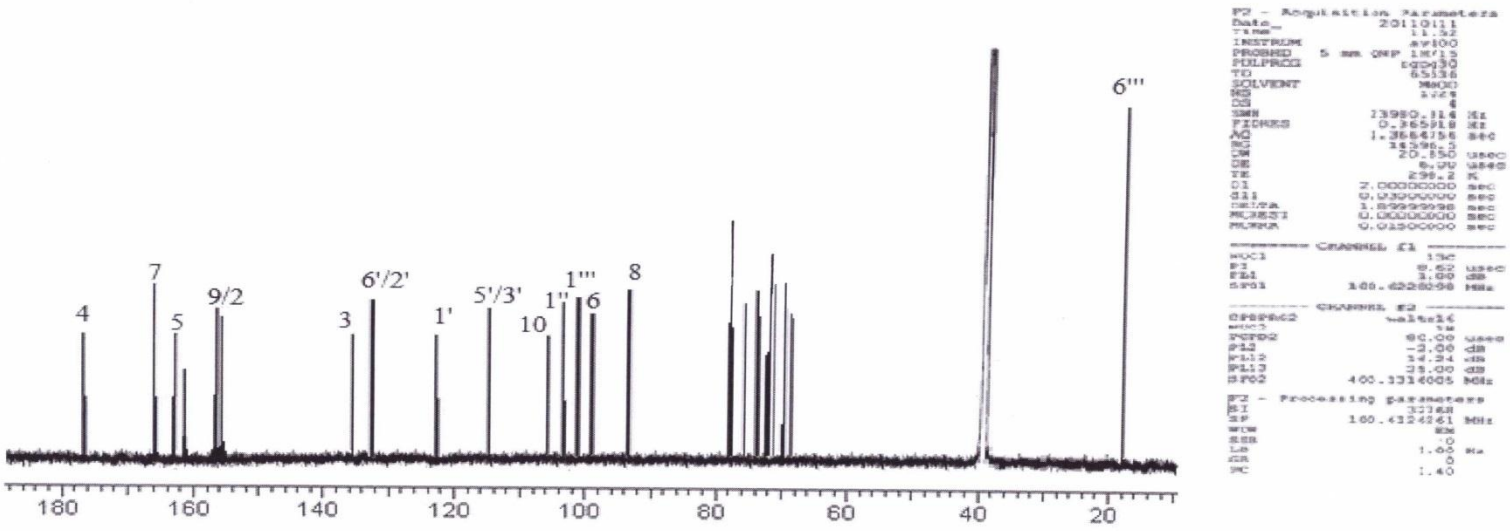
Kaempferol-3-*O*-rutinoside (2); FABMS *m/z* (+ve ion mode): 595 $[M+H]^+$ $C_{27}H_{30}O_{15}$, UV (MeOH, λmax, nm): 349.2; 266.

S5: ^{1}H-NMR (400 MHz, DMSO-*d6*) and ^{13}C-NMR (100 MHz, DMSO-*d6*) data of Kaempferol-3-*O*-rutinoside

Position	**δ_H, ppm (J, Hz)**	**δ_C, ppm**
2	-	155.98
3	-	134.58
4	-	177.23
5	-	162.04
6	6.22 d (2.1)	98.88
7	-	163.31
8	6.33 d (2.1)	93.98
9	-	156.82
10	-	104.79
1'	-	121.39
2'	8.19 d (8.7)	130.76
3'	6.92 d (8.7)	113.40
4'	-	160.92
5'	6.92 (8.7)	114.87
6'	8.19 d (8.7)	131.03
1"	5.02 d (7.8)	102.11
2"		74.83
3"		75.48
4"	3.15-3.90 m	69.23
5"		77.65
6"		67.08
1"'	4.45 d (1.8)	100.10
2"'		70.89
3"'	3.15-3.90 m	72.23
4"'		73.46
5"'		67.88
6"'	1.09 d (6.1)	18.12



S6: ^{1}H-NMR (400 MHz, DMSO-*d6*) Spectrum Kaempferol-3-*O*-rutinoside (**2**)



S7: ^{13}C-NMR (100 MHz, DMSO-*d6*) Spectrum Kaempferol-3-*O*-rutinoside (**2**)

S3: References

[1] T. J. Mabry, K. R. Markham and M. B. Thomas (1970). The systematic identification of flavonoids. Springer-Verlag, New York Inc.

[2] F. Fathiazad, A. Delazar, R. Amiri and S. D. Sarker, (2006). Extraction of flavonoids and quantification of rutin from waste tobacco leaves. *Iran J. Pharm. Res.* **3,** 222-227.

[3] D. Deliorman Orhan, F. Ergun, E. Yeşilada, K. Tsuchiya, Y. Takaishi and K. Kawazoe (2007) Antioxidant activity of two flavonol glycosides from *Cirsium hypoleucum* DC. through bioassay-guided fractionation. *Turkish J. Pharm. Sci.* **4**, 1-14.