

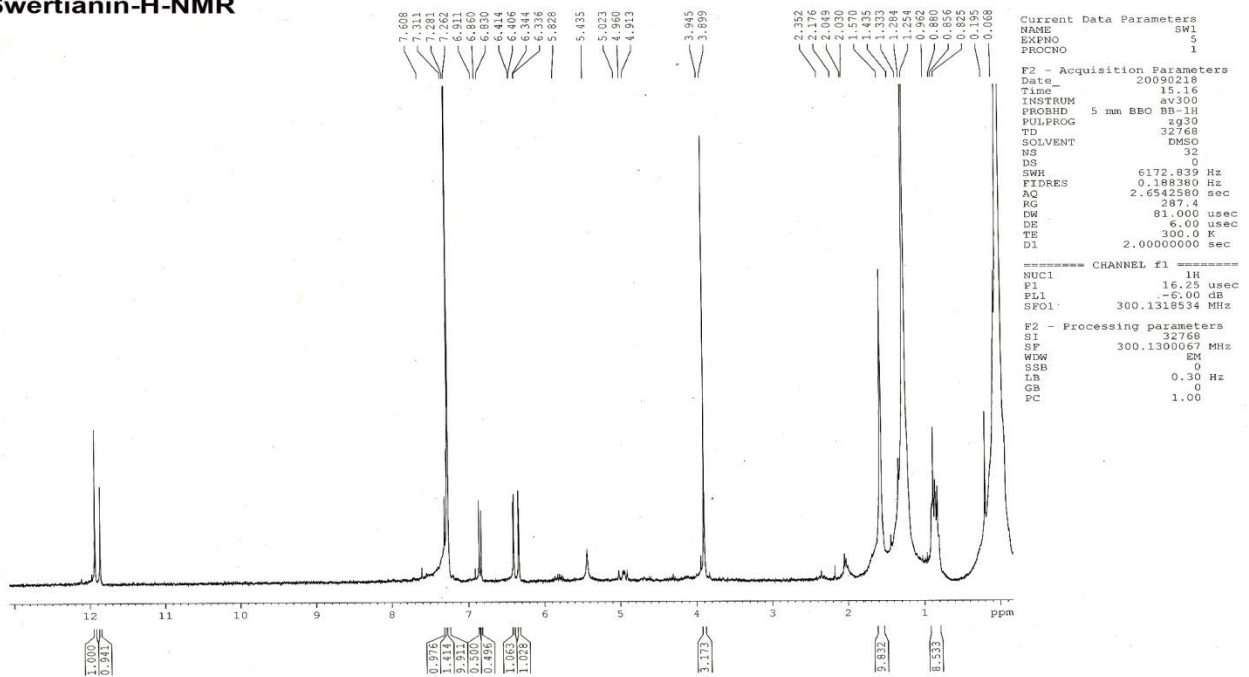
Supplementary Information

Evaluation of anticonvulsant, sedative, anxiolytic and phytochemical profile of the methanol extract from the aerial parts of *Swertia corymbosa* (Griseb.) Wight ex C.B. Clarke

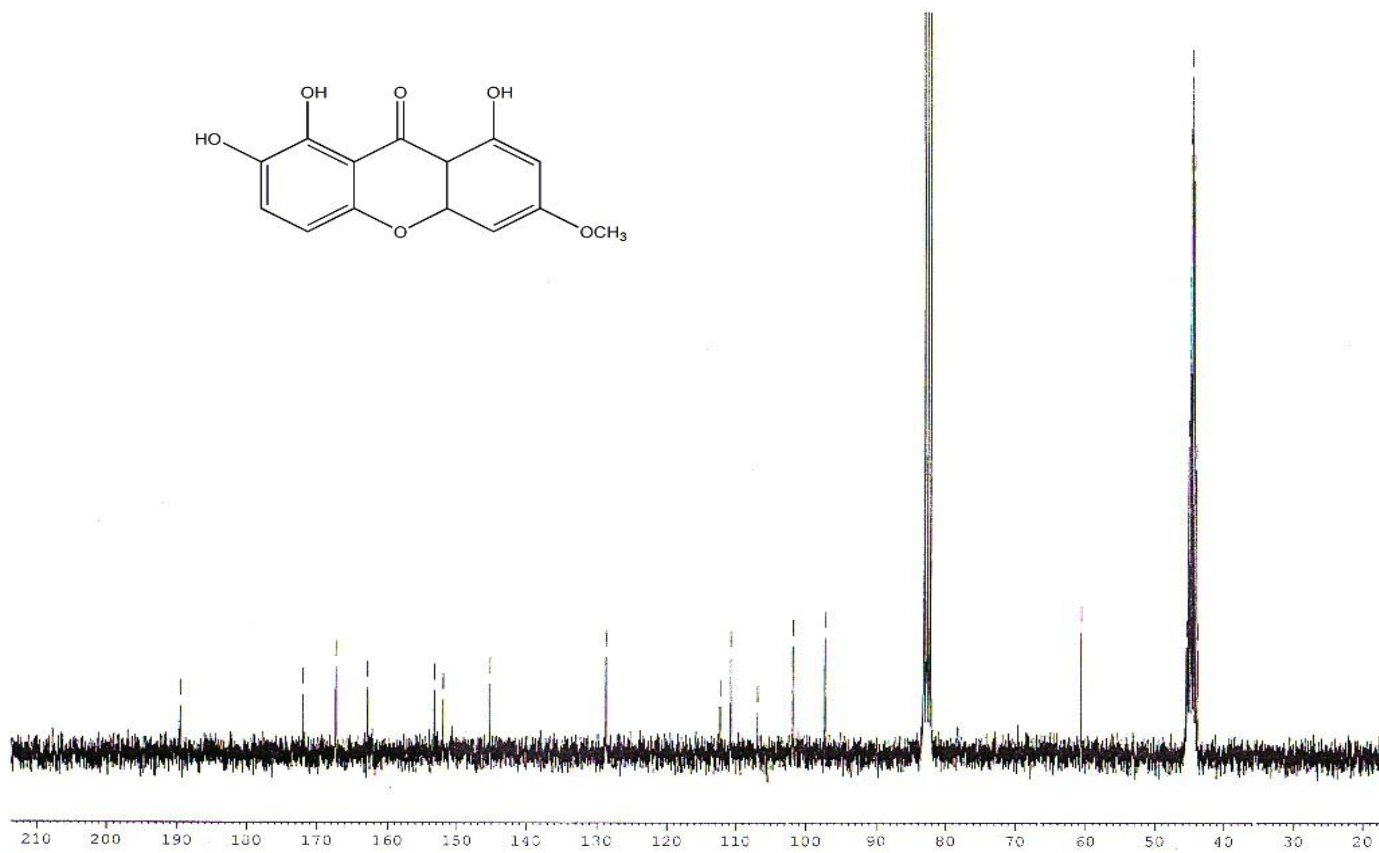
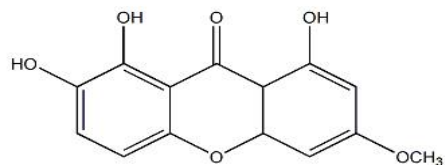
G. Mahendran ^{a*}, G. Thamocharan ^b, S. Sengottuvelu ^b, V. Narmatha Bai ^a

Supplementary figures

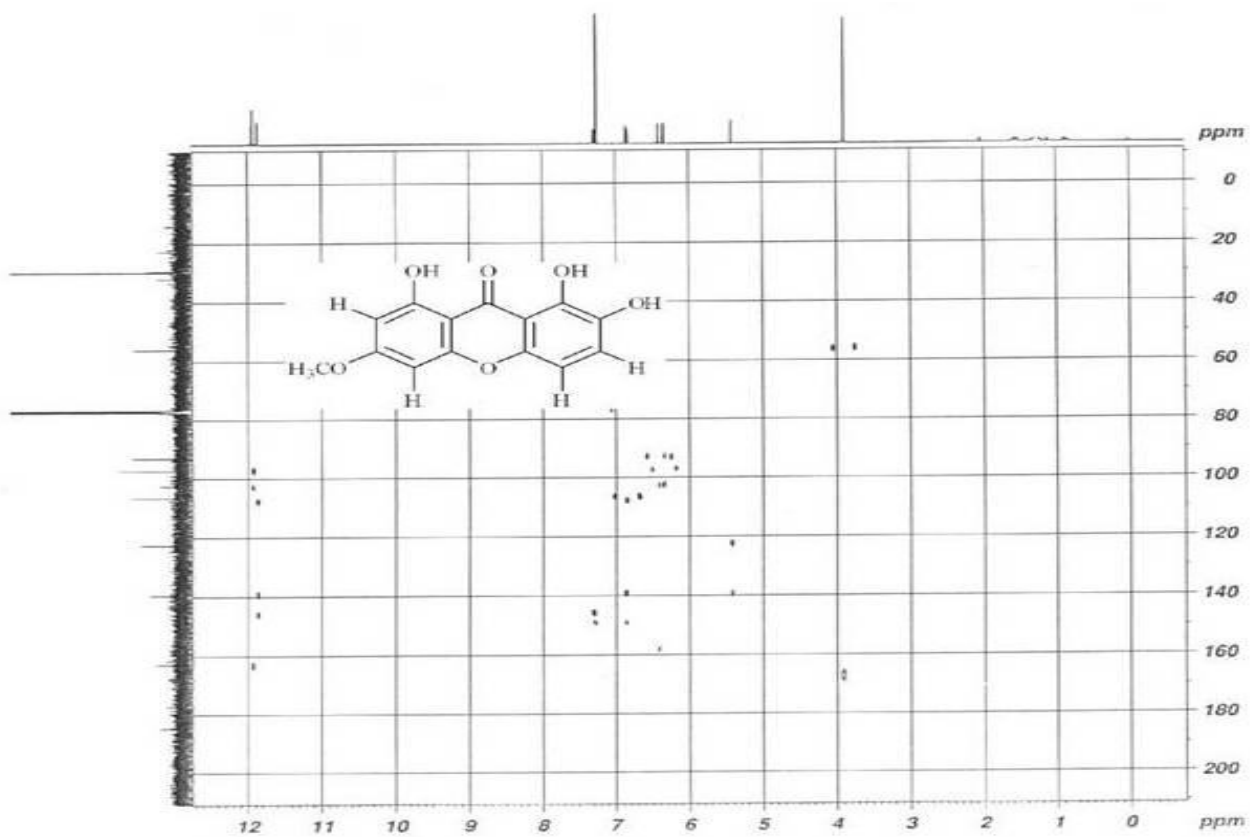
Swertianin-H-NMR



^{13}C -NMR spectra of swertianin



HMBC spectra of swertianin

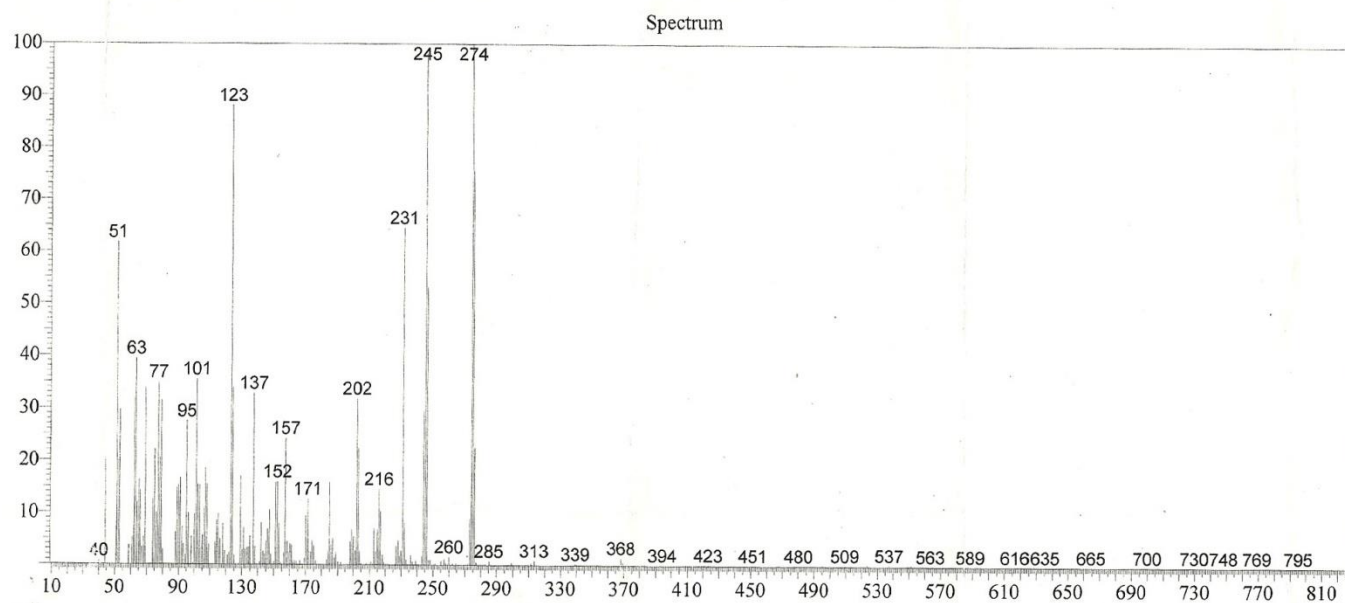


MS spectra of swertianin

National Centre for Mass Spectrometry Indian Institute of Chemical Technology

Sample Information

Sample ID : SW1 Name: G MAHENDRAN, RESEARCH SCHOLAR, Dept OF BOTANY, BHARATHIYAR UNIVERS
Data File : E:\ISO\18774-1.QGD
Analyzed by : Admin
Analyzed : 3/16/2009 6:19:43 PM
Tuning File : C:\GCMSsolution\System\Tune1\Auto Tuning-EI(WithOut Column)- 3-3-09.qgt



Compound 2 : Swertianin
Melting point : 224–227 °C
IR (KBr) ν_{\max} cm^{-1} : 3388-3442 (OH groups), 1662 (C=O), 1282 (O-CH₃)
¹H NMR (300 MHz, CDCl₃) δ (ppm) : 3.90 (s, 3H, C₆-OCH₃) 5.44 (b s, 3H, C₂-OH), 6.34 (d, 1H, J = 2.40 Hz, H-5) 6.41 (d, 1H, J = 2.40 Hz, H-7) 6.85 (d, 1H, J = 9.00 Hz, H-3), 7.30 (d, 1H, J = 9.00 Hz, H-4), 11.87 (s, 1H C₈-OH) 11.94 (s, 1H C₁-OH).
¹³C NMR (75 MHz, CDCl₃) δ (ppm) : 60.69 (C₆-OCH₃), 97.33 (C₄), 101.84 (C₂), 106.89 (C_{9a}), 110.77 (C₅), 112.30 (C_{8a}), 128.75 (C₆), 145.23 (C_{10a}), 152.01 (C_{4a}), 153.28 (C₇), 162.79 (C₈), 167.27 (C₁), 171.92 (C₃), 189.51 (C=O).
HMBC : H-3(C₁, C_{4a}), H-4(C₂, C_{4a}), H-5(C₆), H-7(C₅, C₈, C_{8a}), 1-OH(C_{9a}), 2-OH(C₃), 6-OCH₃(C₆).
EIMS: m/z (%) : 274 (M⁺, 100 %) 260 (5 %), 246 (50 %), 245 (96 %), 231 (64 %), 216 (13 %), 202 (30 %) 185 (16 %), 171 (14 %), 157 (23 %), 152 (18 %), 137 (34 %), 123 (88 %), 101 (36 %), 98 (30 %), 77 (35 %), 63 (40 %), 51 (62 %). C₁₄H₁₀O₆ (274). Anal. Cal Found C: 61.46 %, H: 3.52 %.

1, 2, 8-Trihydroxy-6-methoxy xanthone (swertianin)

Bright yellow crystal, mp 224–227 °C, IR (cm⁻¹): 3388-3442 (OH groups), 1662 (C=O), 1282 (O-CH₃), EIMS m/z 274 [M]⁺ (calculated for C₁₄H₁₀O₆). ¹H NMR (CDCl₃, 300MHz) 3.90 (s, 3H, C6-OCH₃) 5.44 (b s, 3H, C2-OH), 6.34 (d, 1H, J = 2.40 Hz, H-5) 6.41 (d, 1H, J = 2.40 Hz, H-7) 6.85 (d, 1H, J = 9.00 Hz, H-3), 7.30 (d, 1H, J = 9.00 Hz, H-4), 11.87 (s, 1H C8-OH) 11.94 (s, 1H C1-OH). ¹³C-NMR (CDCl₃, 75MHz) 60.69 (C6-OCH₃), 97.33 (C4), 101.84 (C2), 106.89 (C9a), 110.77 (C5), 112.30 (C8a), 128.75 (C6), 145.23 (C10a), 152.01 (C4a), 153.28 (C7), 162.79 (C8), 167.27 (C1), 171.92 (C3), 189.51 (C=O). HMBC: H-3(C1, C4a), H-4(C2, C4a), H-5(C6), H-7(C5, C8, C8a), 1-OH(C9a), 2-OH(C3), 6-OCH₃(C6).