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ROSACEAE

FLAVONOIDS OF *MARGYRICARPUS PINNATUS**

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Key Word Index—*Margyricarpus pinnatus*; Rosaceae; procyanidins; (+)-catechin.

Plant. *Margyricarpus pinnatus* (Lam.) O.K. *Source.* Buenos Aires Province, Argentina (local name 'Yerba de la Perdiz'¹). (A voucher specimen is deposited in the university herbarium). *Uses.* Medicinal (astringent, diuretic, febrifuge).² *Previous work.* Phytochemical screening.³

Compounds isolated. (+)-Catechin (0.05% yield), C₃₀H₂₆O₁₂ procyanidins B₁, B₃ and B₄ (0.15% yield) were isolated from the whole plant by methods described previously⁴ and were identified by direct comparison with authentic material by m.p., m.m.p., co-chromatography (TLC 3 solvents) and NMR and MS analysis of acetates.⁵

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* Part VII in the series "Flavonoids from Argentine Medicinal Plants". For Part VI see *Gazz. Chim. Ital.* **101**, 245 (1971).

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RUTACEAE

EXTRACTIVES OF *CHLOROXYLON SWIETENIA*

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Key Word Index—*Chloroxylon swietenia*; Rutaceae; coumarins; furoquinolines.

Plant. *Chloroxylon swietenia* (DC). *Source.* Madhya Pradesh, India. *Uses.* Wood

resistant to the attack of termites.¹ *Previous work.* Extractives from hardwood: coumarins xanthyletin, xanthoxyletin and 7-demethylsuberosin² and alkaloid skimmianine.³

Present work. Extraction of powdered hardwood with CH_2Cl_2 in a Soxhlet followed by repeated column chromatography on silica gel afforded five coumarins and two furoquinolines identified by IR, UV, MS and, especially, NMR spectra. The assignment of the proton signals given below is supported by observed long-range couplings and nuclear Overhauser effects. The previously isolated xanthyletin was not found.

Xanthoxyletin. M.p. 130–132°, m/e 258, NMR*: 1.46 s, 6H, Me_2C ; 3.86 s, 3H, $\text{C}_5\text{-OMe}$; 5.71 and 6.51 AB, H-7, H-6, $J_{6,7} = 10.2$ Hz, $J_{6,10} = 0.6$ Hz; 6.56 mt, H-10; 6.19 and 7.86 AB, H-3, H-4, $J_{3,4} = 9.5$ Hz, $J_{4,10} = 0.75$ Hz. *Luvangetin.* M.p. 109°, m/e 258, NMR: 1.51 s, 6H, Me_2C ; 3.96 s, 3H, $\text{C}_{10}\text{-OMe}$; 5.70 and 6.33 AB, H-7, H-6, $J_{6,7} = 10.0$ Hz; 6.21 and 7.57 AB, H-3, H-4, $J_{3,4} = 9.5$ Hz; 6.83 s, H-5. *7-Demethylsuberosin.* M.p. 133–135° m/e 230, NMR: 1.74 s, 1.78 s, 2x Me-C= ; 3.37 d, 2H, $J = 7.5$ Hz, CH_2 ; 5.32 mt, $J = 7.5$ Hz, olefinic H; 6.24 and 7.66 AB, H-3, H-4, $J_{3,4} = 9.5$ Hz; 7.05 s, H-8; 7.21 s, H-5, 7.47 s, exchangeable, OH. *Aesculetin dimethylether.* M.p. 144–145°, m/e 206, NMR: 3.82 s, 3.85 s, 2x-OMe; 6.28 and 7.61 AB, H-3, H-4, $J_{3,4} = 9.3$ Hz; 6.86 s, 2H, H-5, H-8. *Skimmianine.* M.p. 176°, m/e 259, NMR: 4.01 s, 3H, $\text{C}_7\text{-OMe}$; 4.12 s, 3H, $\text{C}_8\text{-OMe}$; 4.38 s, 3H, $\text{C}_4\text{-OMe}$; 6.99 and 7.54 AB, H-2, H-3, $J_{2,3} = 2.8$ Hz; 7.20 and 7.98 AB, H-6, H-5, $J_{5,6} = 9.3$ Hz. *Nodakenetin.* M.p. 181–192°, m/e 246, NMR: 1.23 s, 1.36 s, 2x Me-C= ; 3.21 d, 2H, $J = 9$ Hz, CH_2 ; 4.73 t, 1H, $J = 9$ Hz, CH; 6.20 and 7.57 AB, H-3, H-4, $J_{3,4} = 9.3$ Hz; 6.73 s, H-10; 7.21 s, H-5. *γ -Fagarine.* M.p. 140–142°, m/e 229, NMR: 4.06 s, 4.41 s, 2x-OMe; 7.05 and 7.63 AB, H-2, H-3, $J_{2,3} = 2.8$ Hz; 7.05 dd, $J = 7.8$ and 1.4 Hz, H-7; 7.35 dd, $J = 7.8$ and 8.2 Hz, H-6; 7.82 dd, $J = 8.2$ and 1.4 Hz, H-5.

* NMR 100 MHz, CDCl_3 , TMS δ -scale.

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EXTRACTIVES FROM *SARGENTIA GREGGII*

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Key Word Index—*Sargentia greggii*; Rutaceae; triacontane; sitosterol; cerrosillin; 5,6-dimethoxyflavone.

Plant. *Sargentia greggii* S. Watts, (chapote amarillo) (voucher No. 7086). *Previous work.* None. *Occurrence.* Northeastern, Mexico.

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