

CONSTITUENTS OF *COUEPIA PARAENSIS*

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Couepia paraensis (Chrysobalanaceae) is a small South American tree which has not been previously investigated chemically. The ethanolic extract of *Couepia paraensis* was found to be active against murine lymphocytic leukemia P388 (PS system).¹ In this communication we report the isolation and identification of the major sterol, three terpenoids, a chromone, and three flavonoids from *Couepia paraensis*.

EXPERIMENTAL²

PLANT MATERIAL.—The plant material of *Couepia paraensis* was collected in Brazil in 1971 by the Instituto Nacional de Pesquisas da Amazonia, Manaus, Brazil.

EXTRACTION AND ISOLATION OF CONSTITUENTS.—The ground plant material was extracted in a Soxhlet with hexane, chloroform and ethanol respectively. Silica gel column chromatography of the residue from the chloroform extract resulted in the separation of five compounds which were purified by re-column chromatography, prep. tlc and crystallization to afford 5-hydroxy-2,8-dimethyl-6,7-dimethoxychromone (1), sitosterol, oleanolic acid, oleanolic acid acetate and spinosic acid. The chromone was subsequently found not to be significantly cytotoxic (ED₅₀ 60 µg/ml) to the KB cell line.¹ The ethanol extract of the plant after chromatography and crystallization gave naringenin, quercetin, and its glycoside, rutin.

The isolated components were identified by their spectral data and comparison with authentic samples (mixed mp, co-tlc, co-gc) (2-4). Derivatives of the isolated compounds which were prepared to aid in structure identification included oleanolic acid acetate, brominated oleanolic acid acetate (5), spinosic acid acetate and quercetin.

Full details of the isolation and identification of the compounds are available on request to the senior author.

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²Data were obtained with the following instruments: ¹H-nmr: Varian FT-80A; uv: Perkin-Elmer model 200; ir: Perkin-Elmer model 283; gc: Varian Aerograph series 2400, equipped with a FID detector; mp: Fisher-Johns apparatus.