PULVERIN, A NEW CHROMONE FROM THE FRUITS OF NEOCHAMAELLEA PULVERULENTA*

ANTONIO G. GONZÁLEZ, BRAULIO M. FRAGA and OLIVA PINO

Department of Organic and Biochemistry, University of La Laguna, Instituto de Investigaciones Químicas, C.S.I.C., Tenerife, Spain

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Plant. Neochamaelea pulverulenta Erndt (Vent)[1] (Cneorum pulverulentum Vent.) A voucher specimen is deposited in the Herbarium of the Botanical Department, University of La Laguna. Source. Guaza Mountain, Tenerife, Canary Islands, in August. Uses Medicinal. Previous work. Aerial parts [2,3].

Present work. Green fruits (300 g) were extracted with hot EtOH, concentrated in vacuo and chromatographed over SiO₂. Elution with C₆H₆, C₆H₆–EtOAc and EtOAc gave: 3,3-dimethylallylspatheliachromene [4,5], the new natural product pulverin (45 mg), sitosterol and spatheliabischromene [4,5].

Pulverin. (2-methyl-6,8-di-C-prenyl-5,7-dihydroxychromone) (1), (Found: C, 73·29; H, 7·42; C₂₀H₂₀O₄ requires: C, 73·15; H, 7·37%) mp 147–149°, MS: m/e 328 (M⁺), 313, 285, 273, 257, 229, 217 (100%) 205, 177, 128. UV λₑₒ₉ max 214, 230, 265, 305(sh) nm. IR νₐ₅,₅,₆ max 3350, 2960, 2900, 2850, 1660, 1600, 1420, 1100, 860 cm⁻¹. NMR (CDCl₃, τ) −2·96 (1H, phenolic proton at C₅), 3·62 (1H,
s, pyronic hydroger), 4·75 (2H, m, 2 C=CH–), 6·55
(4H, d, J 8 Hz, 2 –CH2–Ar), 7·66 (3H, s, pyronic
methyl), 8·18 (6H, s, 2 Me–C=) and 8·25 (6H, s,
2 Me–C=). This compound was synthesized by
Seshadri et al. [6], mp 149–150°, identical NMR
spectrum. The other compounds isolated were
identified by comparison with authentic samples.

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