TRITERPENES FROM LATEX OF *EUPHORBIA BALSAMIFERA*

ANTONIO G. GONZÁLEZ, BRAULIO M. FRAGA, PEDRO GONZÁLEZ
and ANGEL G. RAVELO

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

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Key Word Index—*Euphorbia balsamifera*; Euphorbiaceae; tabaiba dulce; germanicol; germanicone; lupeol; lupenone; β-amyrin; cycloartenol; dihydroagnosterol; cycloartanone.


Present work. The unsaponifiable of the latex (11) was chromatographed on silica gel, yielding the following compounds which were characterized by their physical and spectroscopic data: germanicol (3·1 g), germanicone (89 mg), lupeol (4·5 g), lupenone (38 mg), β-amyrin (140 mg) and cycloartenol (300 mg) which were identified by comparison with authentic samples; dihydroagnosterol (80 mg), obtained as alcohol, was characterized as the acetate, mp 165–171°C (MeOH), [α]D2 +62 (CHCl3; c 0·76); its UV spectrum [λmax(EtOH) nm (log ε): 236 (3·89), 243 (3·95), 253 (3·79)] was in agreement with an homooannular dienic system which was corroborated by the NMR (CDCl3) signal at δ 5·74 (2H, m, W1/2 15 Hz);

cycloartanone (50 mg), isolated for the first time in nature, mp 95–99°C (MeOH), IR νmax(CHCl3) cm−1: 3020, 1695; MS (probe) 70 eV m/e (rel. int.): 426 M+, 411 (M+−15; 100), 355, 342, 313, 288, 257, 245, 231, 175, 163, 161, 159, displaying characteristic fragments of tetracyclic triterpenes with a cyclopropane ring between C-9 and C-10 [4,5]; NMR (60 MHz, CDCl3): δ 0·60 (2H, dd); its IR and NMR spectra were superimposable with those of a synthetic sample.

REFERENCES


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TRITERPENOIDS OF THE STEMS OF SIX CASTANOPSIS SPECIES OF HONG KONG

WAI-HAAN HUI and MAN-MOON LI

Department of Chemistry, University of Hong Kong, Hong Kong

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Key Word Index—*Castanopsis concinna*, *C. cuspidata*, *C. eyrei*, *C. fabri*, *C. fissa* and *C. hickelii*; Fagaceae; triterpenoids; rearranged oleananes, lupanes, hopanes and ursanes; steroids.