Low Temperature Crystal Structure of Natural Diosgenone

Oscar E. Piro[a], Eduardo E. Castellano[b], Gloria E. Tobón Zapata[c], Silvia Blair Trujillo[d] and Enrique J. Baran[e]*

[a] Departamento de Física and Instituto IFLP (CONICET), Facultad de Ciencias Exactas, Universidad Nacional de La Plata, 1900 La Plata, Argentina
[b] Instituto de Física de São Carlos, Universidade de São Paulo, 13560 São Carlos (SP), Brazil
[c] Facultad de Química Farmacéutica, Universidad de Antioquia, Medellín, Colombia
[d] Facultad de Medicina, Universidad de Antioquia, Medellín, Colombia
[e] Centro de Química Inorgánica (CEQUINOR, CONICET/UNLP), Facultad de Ciencias Exactas, Universidad Nacional de La Plata, C. Correo 962, 1900 La Plata, Argentina. Fax: (54) 0221 425 94 85. E-mail: baran@quimica.unlp.edu.ar

* Author for correspondence and reprint requests

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Diosgenone, Crystal Structure, Antimalarial Activity

The molecular structure of diosgenone, a natural steroidal sapogenin, closely related to diosgenin and isolated from *Solanum nudum*, was solved by single crystal X-ray diffractometry at 120 K and refined by full-matrix least-squares to an agreement factor, R1 = 0.054. It crystallizes in the monoclinic space group $P2_1$, with a = 15.1870(4) Å, b = 7.2710(2) Å, c = 21.2840(6) Å, β = 99.251(1) °, and four molecules in the unit cell (Z = 4). The results constitute the first structural report on a steroidal sapogenin from the diosgenin group.