Molbank **2006**, M504 http://www.mdpi.org/molbank/

4α,14α,Dimethyl-5α-cholest-8-en-3-one thiosemicarbazone

Noureddine Mazoir,*[1] My Youssef Ait Itto,[1] Matías Reina Artiles[2] and Ahmed Benharref[1]

[1] Laboratoire de Chimie des Substances Naturelles, Université Cadi Ayyad, Faculté des Sciences Semlalia, B.P: 2390. Marrakech. Maroc.

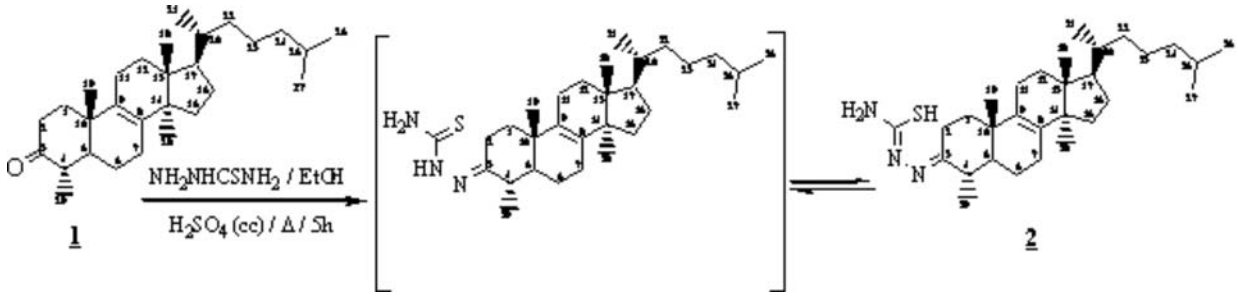
[2] Instituto de Productos Naturales y Agrobiología, IPNA-CSIC, La Laguna, Tenerife, Spain

E-mail**:** mazoir1@yahoo.fr

*Author to whom correspondence should be addressed

Received: 1 August 2005 / Accepted: 17 October 2006 / Published: 1 December 2006

Keywords: *Euphorbia officinarum*, latex, thiosemicarbazide



The compound **2** was prepared from equimolecular quantity of **1** (1g, 2.43 mmol), derivative triterpene resulting from *Euphorbia officinarum*[1], and thiosemicarbazide[2,3] dissolved in ethanol with several drops of conc. H_2SO_4. The mixture was heated at reflux for 5h, and evaporated under reduced pressure. The residue was purified on silica gel column using hexane: ethyl acetate (90:10) as eluent yielded compound **2** (0.99g, 2.06mmol) in 85% yield.

Melting point: 212-213 °C (Hexane)

MS (EI, 70eV): 485 ($M^{+\cdot}$)

^{1}H NMR (300 MHz, $CDCl_3$) d(ppm): 6.33 (NH); 7.25 (NH_2); 8.74 (SH); 0.70 (3H-18, s); 0.96 (3H-19, s); 0.88 (3H-21, d, J = 6 Hz); 0.85 (3H-26, d, J = 2 Hz); 0.86 (3H-27, d, J = 2 Hz); 0.87 (3H-28, s); 1.20 (3H-29, d, J = 6 Hz).

^{13}C NMR (75 MHz, $CDCl_3$) d (ppm): 36.50 (C-1); 37.35 (C-2); 159.35 (C-3) ; 50.58 (C-4); 49.98 (C-5); 21.75 (C-6); 28.12 (C-7); 132.35 (C-8); 135.73 (C-9); 36.36 (C-10); 21.55 (C-11); 25.45 (C-12); 44.54 (C-13); 49.75 (C-14); 30.86 (C-15); 29.81 (C-16); 46.10 (C-17); 15.82 (C-18); 18.15 (C-19); 36.14 (C-20); 18.65 (C-21); 36.56 (C-22); 24.35 (C-23); 32.41 (C-24); 34.58 (C-25); 21.72 (C-26); 21.92 (C-27); 24.22 (C-28); 12.25 (C-29); 106.12 (C-30); 179.18 (C=S).

MS (m/z): 485 (20%), 395 (42%), 282 (65%).

Acknowledgments
We would like to thank Pr. A. Idmessaaoud for helpful discussions.

References

1. Benharref, A.; Lavergne, J.-P. *Bull. Soc. Chim. Fr*. **1985**, 965-972.

2. Beatriz, N. B et al. *Arkivok*. **2002**, 14-23.
3. Ourhriss, N.; Giorgi, M.; Mazoir, N and Benharref, A. *Acta Cryst*. **2005**, C61, o699-o701.