

**Lup-20,(29)-en-3-on-30-al, A NEW LUPANE DERIVATIVE FROM GYMNOSPORA
EMARGINATA (WILLD.) HOOK f. ex. Thw. (FAMILY CELASTRACEAE)**

Vijaya Kumar, M. Uvais S. Sultanbawa, and Dharmassree B. T. Wijeratne
(Department of Chemistry, University of Peradeniya, Peradeniya)

The stem bark of *Gymnosporia emarginata* was investigated as part of our study¹ of potential anti-tumour substances² from the Celastraceae. The benzene extract of the stem bark was found to

contain sitosterol and a number of triterpenes. The major triterpene was β -amyrene whilst β -amyrenone and quinonoid triterpene, pristimerin were also isolated from the extract. Gymnosporol isolated previously from *G. rothiana*³ and shown to be 3,11-diketo-6-hydroxy-olean-12-ene was also present.

A keto-alcohol and a keto-aldehyde were also isolated. These could be related by CrO_3 /pyridine oxidation. Reduction of the keto-alcohol with lithium aluminium hydride gave the lup-20,(29)-ene,3,30-diol with physical characteristics identical to the reported compound isolated from *G. wallichiana*⁴. The keto-alcohol m.p. 186-187°C (α)_D+21.2° was therefore lup-20,(29)-ene-3-on-30-ol and its spectral data were identical to the oil of this structure isolated from *Flourensia heterolepis*⁵. The keto-aldehyde m.p. 193-194°C (α)_D+ 30.8° should therefore be lup-20,(29)-en-3-on-30-al and is being reported for the first time.

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References:

1. Kumar V; Sultanbawa M. U. S; and Wijeratne D. B. T; (1980), *Proc. Ninth Ann. Sess. Inst. Chem. Cey.*, Part I, 6.
2. Gonzalaz A. G; Darins V; Boada J; Alonso G; (1977), *Planta Med.*, **32**, 282.
3. Govindachari T. R; Mohamed P. A; Parthasarathy P. C; (1970), *Ind. J. Chem.*, **8**, 395.
4. Kulshreshtha D. K, (1979), *Phytochemistry*, **18**, 1239.
5. Bohlmann F.; Jakupovic J; (1979), *Phytochemistry*, **18**, 1189.