E 8 TWO NEW COUMARINS FROM MURRAYA GLEINEI (RUTACEAE)

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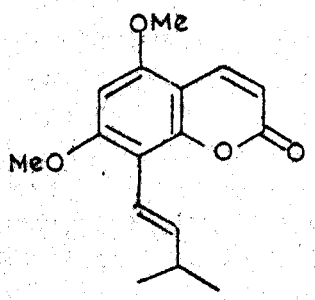
We have previously reported the isolation of several coumarins, the flavone exoticin, the alkaloid skimianin and the sterol stigmasterol from the leaves and stem bark of M.gleinei, a species endemic to Sri Lanka.[1,2,3]

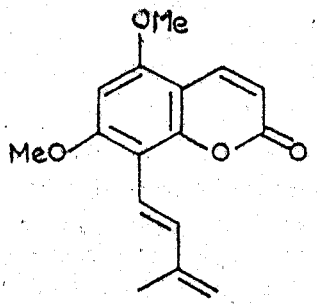
The cold CH_2Cl_2 extract of M.gleinei root bark contained several coumarins, including new coumarins gleinene (1) and gleinadiene (2), together with ten other coumarins and two sesquiterpenoids identified as bulnesol and guaeol.

Structure of these compounds which have been isolated earlier were confirmed by comparison of their spectral (IR, ^{1}H NMR, MS) and physical data (m.p., $(\alpha)_D$). Structures of the two new coumarins were established from their spectral (IR, NMR, MS) data and the ^{1}H NMR shift experiment (using $Eu(fod)_3$ reagent).

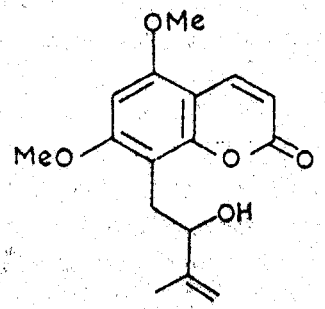
Further confirmation of the structure of gleinadiene was carried out by conversion of omphamurin[4] (3) to that compound.



(1)



(2)



(3)

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References

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3. Wickremaratne, D.B.M., Kumar, V and Balasubramaniam, S. (1984), Phytochemistry 23 (12) 2964.
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