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A NEW STRUCTURE FOR MURRALONGIN

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Murralongin, a 7,8-substituted coumarin has been isolated from *Murraya elongata*[1] and *M. paniculata*.[2] We have isolated a compound murralongin II from *M. gleinei*[3] with the spectral and physical data of murtalongin.

SECTION E

The structure 7-methoxy-8-(1',2'-dimethylpropan-3'-al) coumarin has been proposed for the murralongin.[1] This structure with the 8-side chain -C(Me)=CMeCHO, was arrived at by Nuclear Overhauser effect studies on the compound. Phebalosin[4] also isolated from *M. gleinei* which has a similar ring structure to that of murralongin with the 1',2'-epoxy-3'-methylbut-3-ene side chain gave murralongin II on warming with p-toluene sulphonic acid. We confirmed that murralongin II was identical with murralongin by isolating murralongin from *M. paniculata* and showing it to be identical with that obtained from *M. gleinei* (mixed m.p. and IR). The formation of murralongin from phebalosin cannot be satisfactorily explained and our spectroscopic and chemical studies suggest that the side chain should be -C(CHO)=CMe_2. thus requiring a revision of the accepted structure for murralongin.

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References

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