

**PHOTOLYSIS OF SOME FRIEDELAN - 21 - ONES
FROM *KOKOONA ZEYLANICA* THW'
CELASTRACEAE**

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Location of functional groups in a triterpenoid skeleton is an important step in structure elucidation and conventional approaches may sometimes become very laborious. We have applied photolytic cleavage¹ to locate the 21-keto group in friedelan-3 β -ol, 21-one and the 21-keto and 27-hydroxy functions in friedelan-3 β , 27-diol-21-one.

Friedelan-3 β -ol, 21-one on photolysis, in dry dioxan gave solely the expected non-conjugated diene, 3 β -hydroxy-21, 22 bisnor-E secofriedelan-16, 19-diene. However the trioxxygenated friedelan from *Kokoona zeylanica* gave on photolysis under identical conditions a 1 : 2 ratio of the corresponding diene and the aldehyde, 3 β , 27-dihydroxy-E-secofriedelan-19-ene-21-carboxaldehyde indicating the compound to be friedelan-3 β , 27-diol-21-one. Photolysis using 50% dioxan in water gave a mixture of the diene, and the corresponding 21-carboxylic acid. Uses of photolytic cleavage reactions in the structure elucidation of some friedelanes will be discussed.

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References

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