



A REVISION OF THE STRUCTURE OF FERRUGIN FROM *AGLAIA FERRUGINAEA*

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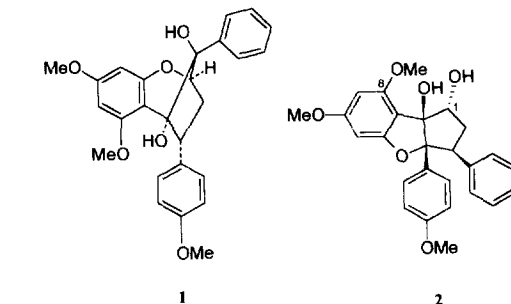
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Key Word Index—*Aglaiia ferruginea*; Meliaceae; ferrugin; rocaglaol.

Abstract—The structure of ferrugin from *Aglaiia ferruginea* has been revised to be the same as rocaglaol which has been isolated from *Aglaiia odorata*. © 1998 Elsevier Science Ltd. All rights reserved

The structure of the compound ferrugin isolated from *Aglaiia ferruginea* Lour. [1] was deduced as **1** based on 2D NMR, and MS evidence. Hydroxy groups present did not acetylate using $\text{Ac}_2\text{O}/\text{py}$ and thus the possibility of a secondary hydroxy group was not considered. A re-examination of the data in comparison with that of other compounds isolated from *Aglaiia* species has indicated that the correct structure is the benzofuran, rocaglaol (**2**). This compound has been isolated previously from *Aglaiia odorata* [2] and the structure of rocaglamide the related amide has been determined by X-ray crystallography [3].

The acetylation reaction was repeated using methyl rocaglate (**3**) and again initially no reaction occurred. A re-examination of the reaction mixture after one week showed some reaction had occurred. The reaction product was isolated and found to be the 1α -acetate. The H-1 β doublet had shifted from δ 5.02 in methyl rocaglate to δ 6.04 in the acetate. An investigation of a model of rocaglaol shows that the secondary hydroxy group at C-1 would be sterically hindered by the methoxy group at C-8. This would



account for the fact that the secondary hydroxy group did not acetylate readily.

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