CHROMANS AND CHROMENES FROM EUODIA LUNU-ANKENDA STEM BARK

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The stem bark of Euodia lunu-ankenda (Family Rutaceae), contained two chromans, a chromene and two related compounds. Previous work includes the isolation of a chroman, three chromenes, a quinolinone and evolitrine from its aerial parts[1] and two more furoquinoline alkaloids, dictamine and kokusaginine and the furocoumarin, marmesin from its stem bark.[2]

The dichloromethane extract of E. lunu-ankenda stem bark contained a chroman with a chelated OH and a $-COCH_3$ substituent. The presence of four quaternary methyl groups and two pairs of methylene triplets suggested that a second pyran ring was fused to the aromatic ring. UV spectra and biogenetic considerations suggest a 6-acetyl-5-hydroxy-(2,3-h)-(6',6' -dimethyl) - pyrano-2,2- dimethyl-3,4-dihydro-(2H)-1-benzopyran structure. A second chroman was shown to be similar except that the second pyran ring was replaced by a methyl substituted cyclohexanopyran ring. A third compound also contained chelated OH and acetyl groups but one aromatic position was unsubstituted. Its 1-H NMR spectrum indicated it to be a chromene and showed the presence of an O-isopentenyl group suggesting a 6-acetyl-7-hydroxy-5-(3'-methyl- 2' -butenyloxy)-2, 2-dimethyl-(2H)-1-benzopyran structure.

Partial structures are proposed for two related compounds which were also present.

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References:

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