E2-10: Batukinaxanthone, a new trioxygenated diprenylated chromenxanthone from *Calophyllum thwaitesii*

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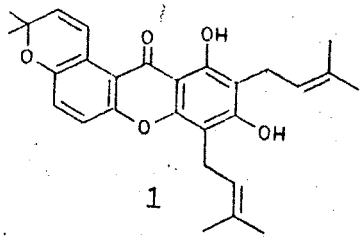
C.thwaitesii Planch and Triana (local name Batu Kina) of the family Guttiferae is an endemic tree in the lowland, evergreen, wetzone forests in Sri Lanka. Six xanthones, 2 chroman acids and 2 triterpenoids have previously been reported from the stem, stem bark, leaves and root bark of this plant. In this communication, the isolation and structural elucidation of a new trioxygenated diprenylated chromenxanthone (Batukinaxathone) from the cold dichloromethane extract of the root bark of *C.thwaitesii* is reported.

Medium pressure liquid chromatography of the cold CH_2Cl_2 extract (24g) of the root bark of *C.thwaitesii* afforded a new compound Batukinaxanthone **(I)** and previously reported thwaitesixanthone, 11, 12-dihydrothwaitesixanthone, calothwaitesixanthone, dimethyl calabaxanthone, trapezifolizanthone and 6-deoxy- mangostin.

The new compound **(I)** shown by UV and IR spectra to be a xanthone of m/z 446.20902 ($C_{28}H_{30}O_5$), was isolated as a minor constituent (10mg). The ^1H NMR of **(I)** indicated the presence of 2 hydroxyl groups, 2 aromatic protons, one 2,2-dimethyl-2H-pyran ring and 2 3-methyl but-2-enyl (isoprenyl) side chains. The absence of any other high field aromatic protons of **(I)** indicated that, the electron rich phloroglucinol ring of the xanthone was fully substituted. The direct comparison of ^1H NMR and ^{13}CNMR spectra of **(I)** with thwaitesixanthone **(II)** and calothwaitesixathone **(III)**, suggested an angularly fused position for the 2,2-dimethyl-**2H**-pyrano ring in **(I)** The two isoprenyl side chains should be attached to 2 and 4 positions of the xanthone nucleus, which are the only available positions of the phloroglucinol ring of the xanthone.

From the above spectral data **(I)** was identified as 6,8-dihydroxy-2,2-dimethyl-5,7-di(3-methylbut-2-enyl)-2H,5H-pyrano-(3,2-a) xanthene-5- one. ^{13}C NMR data further confirmed the structure **I**.



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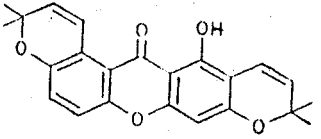

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