

**E2-02 A new trioxygenated diprenylated chromenxanthone from  
*Calophyllum moonii***

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*C. moonii* Planch and Triana (local name Guru Kina) of the family Guttiferae is an endemic tree which grows in the lowland, evergreen, wet zone forests in Sri Lanka. Medium pressure liquid chromatography of the cold hexane extract of the root bark of *C. moonii* afforded a new trioxygenated diprenylated chromenxanthone (Gurukinaxanthone) (**1**), friedelin, taraxarol, taraxarone and 2 unidentified xanthenes. Compound **1**, which was shown to be a xanthone of  $m/z$  446, from its UV and IR spectra was isolated as a minor constituent. The  $^1\text{H}$  NMR (200 MHz) spectra of **1** showed the presence of 2 free hydroxyl groups, one 2,2-dimethyl-2H-pyrano ring and 2 3-methylbut-2-enyl (isoprenyl) side chains in **1**. Gurukinaxanthone (**1**) also had 2 aromatic protons. The absence of any other high field aromatic protons of **1** indicated that, the electron rich phloroglucinol ring of the xanthone was fully substituted. The direct comparison of the  $^1\text{H}$  NMR spectrum of **1** with that of calabaxanthone (**2**) and batukinaxanthone (**3**), suggested a linearly fused position for the 2,2-dimethyl-2H-pyrano ring in **1**. One of the 2 isoprenyl side chains should then be attached

to the 4 position of the xanthone nucleus, which is the only available position of the phloroglucinol ring of the xanthone. The remaining isoprenyl side chain should be attached to the 8 position of the xanthone nucleus. From the above observations **1** was identified as 5,8-dihydroxy-2,2-dimethyl-7,12-di(3-methylbut-2-enyl)-2H,6H-pyrano-(3,2-b) xanthene-6-one.

