E2-16: Xanthones from roots of *Calophyllum thwaitesii* Planch and Triana

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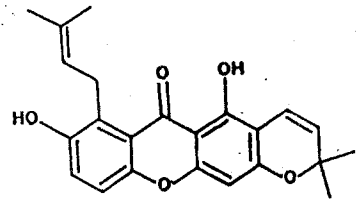
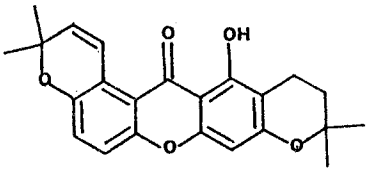
Plants belonging to *Calophyllum* species (Guttiferae) are known for their medicinal uses, and a variety of interesting secondary metabolites have been isolated and characterised. However limited attention was focussed on their biological activity. Recently several compounds isolated from two *Calophyllum* species were found to inhibit HIV-1 replication and cytopathicity through interaction with the HIV-1 RT. Therefore a complete anti-HIV bioassay of all the *Calophyllum* products is a pressing need.

In this study the potent anti-HIV activity of *Calophyllum* products was determined. During this investigation demethoxycalobaxanthone (I) and 2 unknown xanthones with molecular weight m/z 378 each were isolated from the root bark extractives of *Calophyllum thwaitesii* Planch and Triana. One new xanthone was identified as 1,2-dihydro thwaitesixanthone (II), using spectroscopic data and partial synthesis. These compounds have not been previously reported from this plant.

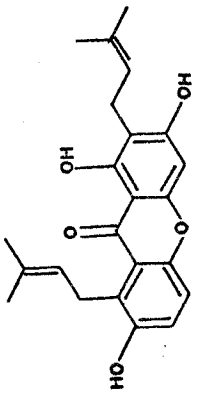
In addition, the following reported compounds were isolated; Thwaitesixanthone (III), Calothwaitesixanthone (IV) 6-deoxy-y-mangostin (V). friedelin and sitosterol.



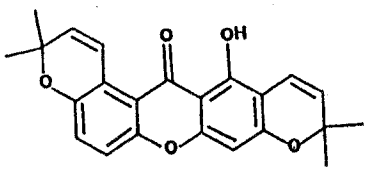
(I) Demethylcalabaxanthone

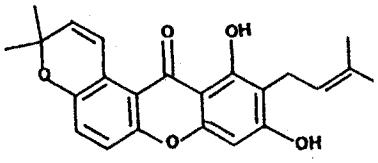


(II) 1,2-Dihydrothwaitesixanthone



(V) 6-Deoxy-γ-mangostin





(IV) Calothwaitesixanthone