## E2-31 Chemistry and antiviral/HIV activity studies of *Calophyllum* species in Sri Lanka

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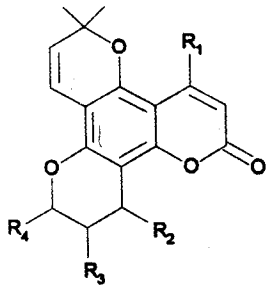
*Calophyllum* species have been identified as potent inhibitors of HIV-1 RT, by recent screening assays, and pyranocoumarins calanolide-A(**1**) and its derivatives, Inophyllums(**2**) and soulattrolide(**3**) are claimed to be active principles. Prompted by the above reports, and as a part of our continuing study on *Calophyllum* species of Sri Lanka, we have undertaken anti viral/HIV studies of extractives and pure compounds from this species.

Number of extracts from 4 endamic *Calophyllum* species were subjected to aspartic proteinase bioassay and only 2 of them were found to be active. The active plants *C.moonii* and *C.cordato-oblongum* are reported to contain pyranocoumarins soulattrolide (**3**) and cordatolides (**4** & **5**) respectively, whereas others do not.




| | $R_1$ | $R_2$ | $R_3$ | $R_4$ |
|---|---|---|---|---|
| 1. Calanolide-A | $CH_2CH_2CH_3$, | ß-OH | α-$CH_3$ | ß-$CH_3$ |
| 2. Inophyllums | Ph | OH | $CH_3$ | $CH_4$ |
| 3. Soulattrolide | Ph | ß-OH | ß-$CH_3$ | α-$CH_3$ |
| 4. Cordatolide-A | $CH_3$ | ß-OH | α-$CH_3$ | ß-$CH_3$ |
| 5. Cordatolide-B | $CH_3$ | α-OH | α-$CH_3$ | ß-$CH_3$ |