

diones from *Uvaria lucida*.

Moriyasu, M.; Takeuchi, S; Ichimaru, M.; Nakatani, N.; Nishiyama, Y.; Kato, A.; Mathenge, S.G; Juma, F.D; ChaloMutiso, P.B

Abstract:

A chemical investigation of the chloroform extract of the roots of *Uvaria lucida* Benth. (Annonaceae), an important African traditional medicine, led to the isolation of six new compounds; three pyrenes, 2-hydroxy-1,8-dimethoxy-pyrene (1), 8-methoxy-1,2-methylenedioxy-pyrene (2), and 7-hydroxy-8-methoxy-1,2-methylenedioxy-pyrene (3), two pyrenediones, 2-hydroxy-1,8-pyrenedione (4) and 2-methoxy-1,8-pyrenedione (5), and a sesquiterpene, (-)-10-oxo-isodauc-3-en-15-oic acid (6), together with eight known compounds (7-14). The structural elucidation by spectroscopic studies of the compounds isolated is described. While pyrenes did not exhibit strong cytotoxicity against human promyelocytic leukemia HL-60 cells, pyrenediones showed strong cytotoxicity. The IC₅₀ of 4 was 70 ng mL⁻¹, which was close to that of etoposide (IC₅₀ = 60 ng mL⁻¹).