Antioxidant Activity and Chemical Constituents of Leaf Essential Oils of Pseuduvaria Monticola and Pseuduvaria Macrophylla (Annonaceae)

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Abstract : The chemical constituents and antioxidant activity of the leaf essential oils of Pseuduvaria monticola and Pseuduvaria macrophylla from the Annonaceae family were investigated. GC-TOFMS analyses identified 46 compounds from Pseuduvaria monticola and 11 compounds from Pseuduvaria macrophylla. The major constituents in the leaf essential oil of Pseuduvaria monticola were a-cadinol (13.0%), calamenene-cis (6.9%), alfa copaene (4%), and epizonarene (3.8%), while in the leaf essential oil of Pseuduvaria macrophylla were caryophyllene oxide (29.7%) and elimicin (28%). The antioxidant activity of both the essential oils were determined using the 2,2'-diphenyl-1-picrylhydrazyl assay (DPPH). The present study suggests that both essential oils demonstrated good antioxidant activity.

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Keywords : Pseuduvaria monticola, Pseuduvaria macrophylla, leaf essential oils, GC-MSTOF, antioxidant activity

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