

**OR-35****Antiinflammatory, Anticholinesterase and Antioxidant Activities of Scopoletin Isolated from *Canarium Sp.* (Burseraceae Kunth)**R.Mogana<sup>1,\*</sup>, Khoo Teng Jin<sup>1</sup> and Christophe Wiart<sup>2</sup>

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Bioassay guided fractionation of an ethanol extract of leaves of *Canarium sp.* (Burseraceae Kunth.) led to the isolation of scopoletin. The structure of this coumarin was elucidated based on spectroscopic methods including nuclear magnetic resonance (NMR-1D and 2D), and mass spectrometry. Scopoletin inhibited the enzymatic activity of 5-lipoxygenase and acetylcholinesterase with an IC<sub>50</sub> equal to 1.76 μM and 0.27mM, respectively and confronted oxidation in the ABTS, DPPH, FRAP and β-carotene bleaching assay with EC<sub>50</sub> values equal to 5.62μM±0.03, 0.19mM±0.01, 0.25mM±0.03 and 0.65mM±0.07 respectively. Scopoletin being anti-inflammatory, acetylcholinesterase inhibitor and antioxidant might be of value for the treatment of neurodegenerative diseases including Alzheimer's diseases, Parkinson's disease and Amyotrophic Lateral Sclerosis. Further in vivo studies are warranted.

**Keywords:** *Canarium sp.*, antiinflammatory, antioxidant, coumarin, scopoletin.