

## Acuminatol and other antioxidative resveratrol oligomers from the stem bark of *Shorea acuminata*

### Abstract

A new resveratrol dimer, acuminatol (1), was isolated along with five known compounds from the acetone extract of the stem bark of *Shorea acuminata*. Their structures and stereochemistry were determined by spectroscopic methods, which included the extensive use of 2D NMR techniques. All isolated compounds were evaluated for their antioxidant activity using the 2,2-diphenyl-1-picrylhydrazyl (DPPH) radical scavenging activity (RSA) and the  $\beta$ -carotene-linoleic acid (BCLA) assays, and compared with those of the standards of ascorbic acid (AscA) and butylated hydroxytoluene (BHT). All compounds tested exhibited good to moderate antioxidant activity in the DPPH assay (IC<sub>50</sub>s 0.84 to 10.06 mM) and displayed strong inhibition of  $\beta$ -carotene oxidation (IC<sub>50</sub>s 0.10 to 0.22 mM). The isolated compounds were evaluated on the Vero cell line and were found to be non-cytotoxic with LC<sub>50</sub> values between 161 to 830  $\mu$ M.