



# Mangostanaxanthes I and II, New Xanthes from the Pericarp of *Garcinia mangostana*

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## Abstract:

Two new xanthes: mangostanaxanthes I (3) and II (5) were isolated from the pericarp of *Garcinia mangostana*, along with four known xanthes: 9-hydroxycalabaxanthe (1), parvifolixanthe C (2),  $\beta$ -mangostin (4), and rubraxanthe (6). Their structures were elucidated on the basis of IR, UV, 1D, 2D NMR, and MS spectroscopic data, in addition to comparison with literature data. The isolated compounds were evaluated for their antioxidant, antimicrobial, and quorum-sensing inhibitory activities. Compounds 3 and 5 displayed promising antioxidant activity with IC<sub>50</sub> 12.07 and 14.12  $\mu$ M, respectively using DPPH assay. Compounds 4-6 had weak to moderate activity against *Escherichia coli* and *Staphylococcus aureus*, while demonstrated promising action against *Bacillus cereus* with MICs 0.25, 1.0, and 1.0 mg/mL, respectively. The tested compounds were inactive against *Candida albicans*. However, they showed selective antifungal potential toward *Aspergillus fumigatus*. Compounds 3 and 4 possessed quorum-sensing inhibitory activity against *Chromobacterium violaceum* ATCC 12472.

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