

Bioactive Angucyclinones from *Streptomyces matensis* BG5, Isolated from the Rhizosphere of *Rosa indica* L.

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A newly isolated strain *Streptomyces* sp. BG5 was investigated for the production of bioactive compounds. The strain exhibited broad spectrum activity against an array of nine test organisms including Gram-positive bacteria, Gram-negative bacteria, fungal and microalgal pathogens along with a moderate cytotoxic response (28.9% mortality) in a microwell cytotoxicity assay against the brine shrimp *Artemia salina*. The morphological, physiological and biochemical characterization of the *Streptomyces* sp. BG5 strongly suggested it to be a member of the genus *Streptomyces*. The nucleotide sequence of 16S rRNA gene (1433 pb) of the *Streptomyces* sp. BG5 (Gene bank accession number EU301836) exhibited high similarity (98%) with *Streptomyces matensis*. The large scale fermentation of *Streptomyces* sp. BG5 and subsequent extraction, isolation and purification of the crude extract afforded three pure compounds. The structures of these compounds were identified as ochromycinone, emycin D and 1-acetyl- β -carboline based on NMR spectroscopy, mass spectrometry and by comparison with reference data from the literature.