

Antibacterial polyketide from *Lasiodiplodia theobromae*, inhabiting the lichen host, *Pyrenula bahiana* on mangrove ecosystems in Puttalam lagoon, Sri Lanka

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Abstract

Lasiodiplodia theobromae is one of the frequently isolated fast growing endolichenic fungus. This fungus was isolated from the lichen host, *Pyrenula bahiana* collected from the mangrove ecosystems in Puttalam lagoon and identity was confirmed based on rDNA-ITS sequence homology. Secondary metabolites of *L. theobromae* were extracted into ethyl acetate and subjected to antibacterial assay against *Escherichia coli* (ATCC25922), *Staphylococcus aureus* (ATCC25923) and *Bacillus subtilis* (ATCC6051). Crude extract at a concentration of 6.8 µg/ml showed good anti-bacterial activity against the bacterial strain *S. aureus* compared with the activity of the standard Azithromycin at a concentration of 5.0 µg/ml. Active crude extract was partitioned to obtain methanol,

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