Antimicrobial and Cytotoxic Activity from Lasia spinosa and Isolated Lignan

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SUMMARY. Studies were carried out on the rhizome of Lasia spinosa (L.). The petroleum ether, ethyl acetate and the methanolic extract revealed moderate activities against Escherichia coli, Bacillus cereus, Staphylococcus aureus, Candida albicans, Aspergillus niger and Vibrio parahemolyticus test organisms. The crude extracts and purified compound, meridinol (1) were screened for antimicrobial activity against a wide range of gram-positive and gram-negative bacteria and fungi by the disc diffusion method. The cytotoxic potential of the extractives and meridinol was also determined by using brine shrimp lethality bioassay, where the extractives demonstrated significant cytotoxic activities. The petroleum ether, ethyl acetate, methanol extracts, one column fraction and compound 1 demonstrated LC₉₀ of 11.22 µg/ml, 12.3 µg/ml, 13.49 µg/ml, 11.57 µg/ml and 15.85 µg/ml, respectively.

KEY WORDS: Antimicrobial activity, Araceae, cytotoxicity, Lasia spinosa, Meridinol. *Author to whom correspondence should be addressed. E-mail: cmhasan@gmail.com.