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A Comparative Study: Antimicrobial Activity of Methanol Extracts of Lantana camara Various Parts

Badakhshan Mahdi Pour, Sasidharan Srinivasan, Rameshwar Naidu Jegathambigai, Ramanathan Suresh
aDepartment of Biotechnology, Faculty of Applied Sciences, Asian Institute of Medicine, Science and Technology, 08000 Sungai Petani, Kedah, Malaysia, Tel: +604 4298000, Fax: +604 4298007;

ABSTRACT
Finding new resources of antibiotics based on natural products used by traditional practitioners was the main aim to study extracts of root, stem, leaf, flower and fruit of Lantana camara L. (Verbenaceae), a medicinal plant available in Malaysia. A panel of organisms including 10 bacteria and 5 fungi were treated by L. camara extracts of different parts based on disk diffusion method and broth microdilution technique. The leaf extract presented the highest antibiotic effect among all parts of plant especially against Gram positive Bacillus cereus (zone of inhibition 13.0 +/- 0.0 mm, MIC/MBC 9.4 +/- 4.4 mg/ml) and Gram negative Salmonella typhi (zone of inhibition 13.5 +/- 2.1 mm, MIC/MBC 12.5 +/- 0.0 mg/ml). In conclusion, this study may support the conventional use of leaf extract of L. camara in some infectious gastroenteritis disorders, a potential subject to further isolation and identification as a supply of antibacterial substances.

KEYWORDS
Antimicrobial Activity . Broth Microdilution . Gastrointestinal Diseases . Lantana camara . Minimum Inhibitory Concentration . Zone of Inhibition

REFERENCES