# ANTIBACTERIAL ACTIVITY OF SOME SRI LANKAN PLANTS

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There has been considerable interest in the biological activity of plant-based products the world over and also in Sri Lanka[1]. We have recently initiated a project on screening plants of Sri Lanka for biological activity[2]. The present preliminary report is of results from the screening of 79 plant extracts from 44 plants for antibacterial activity.

The following methanol extracts showed significant against Staphylococcus aureus: Hortonia angustifolia (roots), Ulex europaeus (whole plant), Artemisia vulgaris (leaves & stem), Psychotria nigra (stem & leaves), Psychotria bisculata (stem), Ricinus calamus (leaves), Hypericum mysorense (stem), Gaultheria rudis (aerial parts), Curcuma longa (tubers), Phyllanthus reticulatus (leaves), Phyllanthus embilica (leaves), Glochidion montanum (leaves) and Semecarpus obscura (stem & leaves). However, none of the extracts showed significant activity against Escherichia coli.

The air-dried plant materials were extracted successively with hot hexane/light petroleum (40-60°), dichloromethane, ethylacetata and methanol in a soxhlet, or extracted directly with cold ethylacetate and methanol/ethanol, respectively, in a bottle shaker for a period of 48 hours.

Antibacterial activity was measured using a modified tube dilution technique with subsequent subculture on semisolid medium to determine the minimum bactericidal concentration[3] (MIC) against standard strains of Escherichia coli and Staphylococcus aureus.

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References:

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