

## Preliminary study of anti-bacterial effects of an Ayurvedic recipe – Rathakalka

Rathakalka is a popular Ayurvedic recipe prescribed routinely for infants by traditional physicians in Sri Lanka. This particular recipe is being used in infants at a dose of 250mg.twice a day orally for two main purposes, one use of it as a preventive medicament to protect children from certain diseases during infancy. And the other use of it is as a curative measure in infants and young children against certain diseases specially skin diseases, upper respiratory tract infection and fever. One of the main causes for above conditions is bacterial infection. The objective of this experiment was to study the antibacterial activity of Rathakalka.

0.1 gm. of Rathakalka was dissolved in 5ml. of sterile distilled water and filter sterilized using a Hemmings filter. This sterile water soluble extract of Rathakalka was used in this study. Anti-bacterial assay was performed using cylinder plate method in Nutrient agar and incubated for 48 hours at room temperature. Bacterial species used were *Pseudomonas aeruginosa*, *Escherichia coli*, *Staphylococcus aureus* and *Listeria monocytogenes*, all obtained from the culture collection of the department of Microbiology, University of Kelaniya.

A clear inhibition zone of the bacterial lawns were observed repeatedly in all plates except *E.coli* indicating that the water extract of Rathakalka has anti - bacterial effect on *Pseudomonas aeruginosa*, *Staphylococcus aureus* and *Listeria monocytogenes*. The results of this preliminary study justify scientifically the use of this Ayurvedic preparation in some infective conditions in infants and children since last few centuries by traditional Ayurvedic practitioners in Sri Lanka.