AYURVEDIC PREPARATIONS FOR TREATING SKIN INFECTIONS: COMPARATIVE ANTIBACTERIAL ACTIVITY OF FRESH AND REFRIGERATED DECOCTIONS OF THREE *FICUS* SPECIES, *THESPESIA POPULNEA* AND *ABUTILON INDICUM*

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Introduction

In the Ayurveda system of medicine, medicinal plants are used for external preparations such as soaks, cool wet dressings, lotions, or powders in the treatment of skin infections. The decoctions of the barks of *Ficus benghalensis* L. (Nuga), *Ficus religiosa* L. (Sacred Bo), *Ficus racemosa* L. (Attikka) and *Thespesia populnea* (L.) Soland (Gansuriya) and of the leaves of *Abutilon indicum* (L.) Sweet (Beth Anoda) is used to cure or reduce inflammatory reactions of abscesses and wounds (Jayasinghe, 1979; *Charaka Samhitha*, 1996). Normally, freshly prepared decoctions are prescribed. Most patients store the plant decoctions in the refrigerator for further use. However, there is little scientific documentation about the effectiveness of the fresh and refrigerated medicinal plant decoctions for treating skin infections. Therefore, studies on the antibacterial activity of such medicinal plant decoctions are important.

Materials and Methods

Clean, well-crushed fresh bark (60 g each) of *F. benghalensis, F. religiosa, F. racemosa* and *T. populnea* and leaves (60 g) of *A. indicum* were separately boiled in 960 mL of water (16 times the weight of plant material) and reduced to 120 mL (that is 8 to 1 reduction of volume) within 2 h to obtain the plant decoctions. Each decoction was tested against three human pathogenic bacteria, *Escherichia coli* NCTC (National Collection of Type Culture) 10418, *Staphyloccocus aureus* NCTC 6571 and *Pseudomonas aeruginosa* NCTC 10662, *S. Aureus*, using the well diffusion method. Mueller-Hinton Agar (MHA) was used for the bioassay. Equidistant wells of 12 mm in diameter and 4 mm in depth were bored into the MHA using a sterile cork borer and the wells were completely filled with the test decoctions. The plates were left on the bench for 30 min for absorption of decoctions and then incubated at 33-34 ^{0}C for 24 h. The plates were examined for areas of no growth of organism around the wells and diameters of the zones of the inhibition were measured. All the samples of decoctions were refrigerated at 2-4 ^{0}C for 24 h. The