

Review on In Vitro Antibacterial and Antioxidant Potential of Ingredients of Sri Lankan Traditional Herbal Formula, “Dasapanguwa”

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Abstract

The ‘Dasapanguwa’ herbal formulation which is commonly consumed as a traditional medicine in Sri Lanka consists of ten ingredients, namely the rhizome of *Zingiber officinale* (Ginger), the dried stem of *Coscinium fenestratum* (Tree Turmeric) leaves, stems of *Oldenlandia corymbosa* (Pathpadagam), dried berries of *Solanum xanthocarpum* (Katuwelbatu), dried leaves of *Justicia adhatoda* (Pawatta/Adathoda), *Piper nigrum L.* (Black Pepper), the dried stem and roots of *Glycyrrhiza glabra* (liquorice), dried seeds of *Coriandrum sativum* (Coriander), *Solanum melongena L.* (Elabatu /Eggplant) and the rhizome of *Alpinia calcarata* (Snap ginger). The objectives of this project were to identify the antibacterial and antioxidant properties of the herbal components of *dasapanguwa* and their ability to heal diseases. All ingredients have antioxidant components such as polyphenols, and flavonoids which have been examined using 2,2-diphenyl-1-picrylhydrazyl-hydrate radical scavenging ability. Antibacterial properties of *Coscinium fenestratum*, *Oldenlandia corymbosa*, *Justicia adhatoda*, *Piper nigrum L.*, *Glycyrrhiza glabra*, *Coriandrum sativum* and *Solanum melongena L.* were demonstrated using antimicrobial susceptibility testing. This review contributes to the collective understanding of the antioxidant and antibacterial properties of the ingredients in *Dasapanguwa*, as synthesized from literature on Google Scholar and PubMed. Further research is needed to assess the antibacterial and antioxidant properties of *Dasapanguwa* decoction due to the lack of existing literature on its capabilities.

Keywords: Antibacterial, Antioxidant, Ayurvedic, Dasapanguwa, Herbal Formulation