



## STANDARDIZATION OF BAKULADI GANDUSHA AGAINST THE LABORATORY SPECIMEN OF STAPHYLOCOCCUS AUREUS

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### ABSTRACT

The Ayurveda and Traditional medical systems are used mainly by using herbal and mineral preparations for the treatment of diseases. Ayurveda recommends *Gandusha* (mouthwash) as a specialized local therapy for good oral hygiene which maintains and promotes the oral hygiene by exerting the cleansing action to increasing the defense mechanism in the oral cavity. Medicinal plants included in herbal formulas are contained many types of anti-microbial compounds which is naturally occurring and having minimum side effects. In this study *Staphylococcus aureus* was used to check anti-microbial properties in standardization of *Gandusha*. According to the observations, *Bakuladi Gandusha* mostly used in Out Patient Department of *Shalakya* at Gampaha Wickramarachchi Ayurveda Teaching Hospital, Sri Lanka and has been clinically proved with successful results in patients of periodontal diseases. The main purpose of this study is to identify maximum effective concentration of this *Gandusha*, which have the anti-bacterial effect against *staphylococcus aureus* by Anti Bacterial Susceptibility Test (ABST). According to *Gandusha paribhasha*, *Bakuladi* decoction was diluted in to series of concentrations. Four samples of decoction on the bacterial strain were evaluated by using well diffusion method to evaluate the highest Inhibitory Zone Diameter (IZD) with in the concentration series for antimicrobial activity. The samples of *Bakuladi Gandusha* has got the positive antibacterial effect  $p < 0.05$  at 95% level of significance on laboratory specimen of *Staphylococcus aureus*. But maximum mean inhibitory zone diameter was observed in sample D which has 1:1 dilution is 12.67mm.

**KEYWORDS:** *Bakuladi Gandusha*, *Staphylococcus aureus*, Standardization.

### INTRODUCTION

The History of Traditional Sri Lanka medical system is an ancient as the civilization of the island. This is the Traditional medical system in the country and it is a combination of Ayurvedic Medicine and Traditional Medical system has two basic objectives. They are maintenance of health of a healthy individual and eradication of diseases in diseased patient. The first objective is attained by giving guidelines related to healthy living and second objective is attained by curing disease. The Both systems are used mainly by using herbal and mineral preparations for the treatment of diseases. The plants are used as single or as compounds. Medicinal plants contained many types of anti-microbial compounds which is naturally occurring and having minimum side effects. *Bakuladi Gandusha* (mouthwash) is mostly used formulation as mouthwash in Out Patient Department (OPD) of *Shalakya* at Gampaha Wickramarachchi Ayurveda Teaching Hospital Sri Lanka. According to the observations, it has been proved with successful results in patients of periodontal

diseases. Diseases of *Dantamulagatha roga* (Periodontal diseases) are *Sitada*, *Danta Puppataka*, *Danta Veshta*, *Saushira*, *Mahasaushira*, *Paridara*, *Upakusha*, *Danta Vaidarbha*, *Vardhana*, *Adhimamsa* and five types of *Danta nadi*. Periodontal disease is defined very specifically, as involvement of periodontal disease is considered as one must have at least one periodontal site with 3 millimeters or more of attachment loss and 4 millimeters or more of pocket depth (Wright et al, 2017). *Dantamulagata roga* were caused by vitiated *Kapha* and *Rakta* (Sharma, 2010). The symptoms depend on the stage of disease, but generally include, bleeding from gums while brushing, bad breath, changes in the position of your teeth or loose teeth, receding gums, red, tender, or swollen gums, buildup of plaque or tartar on teeth, pain when chewing, tooth loss, foul taste in mouth, inflammatory response through the body. Symptoms of Periodontal disease in the early stage are often not very noticeable (Healthline - 2017).