

**DEVELOPMENT OF BIO ACTIVE HERBAL
JELLY FROM *Cyclea peltata* (KAHIPITTAN)
LEAVES**

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ABSTRACT

Cyclea peltata is a native herbal plant which belongs to the family *Menispermaceae*. The *C.peltata* leave extraction obtained with the aid of water, transforms into semi solid structure as in jelly. This plant is also known to have possessed high medicinal value. Therefore, the gelling ability & medicinal value found in the Kahipittan leaves can be used to produce therapeutic food. To screen the bio activity in terms of anti microbial activity against *Staphylococcus aureus*, *Escherichia coli* and fungi *Candida albicans* were evaluated for three concentrations (0.1g/ml,0.5g/ml,1g/ml) of leaf extractions. For the sensory evaluation four workable solutions were prepared by changing the leave extraction & sugar content. Constant amount of Sodium Meta BiSulfide, permitted amount of colorings and flavors in powder form, 2% of pectin by final volume were added to each sample separately. Sensory attributes such as taste, aroma, flavor, color, appearance, and overall acceptability were evaluated using five point hedonic scale with thirty untrained panelist. Collected data were statistically analyzed using Friedman test with the confidence level of 95% using MINITAB statistical software. Microbiological analysis & shelf life analysis were performed for the selected best sample from the sensory evaluation under the refrigerated condition & room temperature condition separately. Parameters such as pH level and Total Soluble Solids were measured for the selected best sample throughout the storage under both refrigerated and normal room temperature conditions. The leaves soaked in water under the normal room temperature conditions produced the best extraction with a high gelling property. Any inhibition zone was not observed for all the microbial strains. Therefore, antimicrobial activities of *C.peltata* leaf extracts against all tested microbes were shown negative. According to the results obtained from the sensory evaluation, Sample "B" has scored the highest values for all sensory parameters Therefore, sample B can be recommended as the best formulation which could be improved as a commercial therapeutic jelly especially for gastritis patients. pH of the final product 3.9 and TSS 18°. Product shelf life under refrigerated storage with temperature at 4 ± 1 °C was 7 days . Microbial quality was within the acceptable limit.