

## **Development of a Herbal Jelly Using *Cissampelos pareira* and *Aloe vera* blend**

D.D. Kahandawa\*, A.H.G.S. Udari and R.R.P.Y.K. Rathnayaka

*Department of Biotechnology, Faculty of Science, Horizon Campus, Malabe, Sri Lanka*

Jelly is a product with a semi-solid texture and is characterized by the concentration of plant components and sugars. The use of chemicals and artificial ingredients in the preparation of jelly products is a major concern related to health issues. Hence, this study was aimed to develop herbal jelly from velvet leaf (*Cissampelos pareira*) and Aloe (*Aloe vera*) blend with natural flavors. Three jelly samples were prepared by varying the flavors of sugar cane, kithul treacle, and bee honey. Sensory evaluation was conducted and results were analysed by Freedman non-parametric test using (MINITAB). Herbal jelly prepared with bee honey, *Cissampelos pareira*, and *Aloe vera* plant blend were selected as the most preferable herbal jelly sample. The selected sample was analysed for proximate composition and it contained 0.2% of ash, 0.6% of crude protein, 0.2% of moisture, 80.9% crude fiber, 47.4% of pectin, and 31.2% of sugar by mass. Phytochemical tests revealed the presence of glycosides, flavonoids, alkaloids, and steroids which functionally beneficial for humans. Total soluble solids (TSS) value of 6.9% is compatible with Sri Lankan Standard Institution (SLSI). Alcohol test confirmed that the absence of alcohol in the herbal jelly product. The David person's chemical analysis on food test revealed that the developed herbal jelly contained 76.9 kcal per 100g of the sample. Analysis of microbial parameters (aerobic plate count, *E. coli*, yeast, and mold count) results in the count which compares with the SLS standards and shelf-life attributes for six weeks suggesting that herbal jelly product as a stable for a shelflife of six weeks hopefully beyond. According to the tests results provide evidence that this newly developed jelly product can be used as a healthy dessert.

*Keywords: Aloe vera, Bee honey, Cissampelos pareira, Jelly*