# DEVELOPMENT OF SAUCE USING JACK FRUIT SEED FLOUR & SOYA MILK ENRICHED WITH Gymnema sylvestre LEAVES POWDER AND FLAVORED WITH HONEY, SALT & LEMON JUICE



# BY

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#### **ABSTRACT**

The research study was carried out to develop sauce using jackfruit seed flour & soya milk enriched with *Gymnema sylvestre* leaves to powder and flavored with honey, salt, and lemon juice. In this research, jackfruit seed flour was chosen as the main ingredient and base of the sauce enriched with *Gymnema sylvestre* leaves to powder and added with soya milk to enhance the nutritional values of the sauce and flavoring with honey, salt, and lemon juice.

The fresh sauce was prepared by adding *Gymnema sylvestre* leaves powder into soya milk and mixing them with jackfruit seeds flour. The freshly made sauce was separately flavored with honey, salt, and lemon juice and then boiled. The treatments are as follows T1-10 ml honey, T2-10 ml salt, and T3-10 ml lemon juice.

Physico-chemical analysis vz — pH, moisture content, protein content, fiber content, fat content, titratable acidity, ash content was conducted using standard AOAC Methods for all three treatments. The data was analyzed by IBM SPSS Statistics 25 software. The titratable acidity value of the sauce samples was ranged from 0.2487% - 0.2797% and the moisture content of the sauce samples was ranged from 78.2800% - 84.9300% respectively for the sauce product. The pH value of the sauce samples was ranged from 4.5967% - 4.8100%. The protein content of the sauce samples was ranged from 3.9000% - 4.5100%. The fat content of the sauce samples was ranged from 0.5200% - 0.5600%. The fiber content of the sauce samples was ranged from 0.3000% - 0.3100%. The ash

content of the sauce samples was ranged from 1.0000% - 1.0100%. Sensory evaluation was conducted to all three different flavored sauce samples by 30 untrained panelists using a five-point hedonic scale on color, flavor, texture, mouthfeel, odor, and overall likeness. T2 (534) had the highest preferable sensory attributes having the highest color, flavor, texture, and overall likeness.

All physicochemical parameters of T1 and T2 samples complied with the SLS standard (SLS 1035:1995) for the sauce product. But, T3 sauce samples' moisture content was not compiled with SLS standard (SLS 1035:1995) for the sauce product. However, T2 had the highest preference for sensory attributes. As such, salt flavored sauce prepared from jack fruit seed flour and soya milk enriched with *Gymnema sylvestre* was selected as the most preferred sauce sample. Therefore, it can be concluded that salt flavored sauce prepared from jackfruit seed flour and soya milk enriched with *Gymnema sylvestre* leaves powder is having good potential for commercial production and further development.

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