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**OPTIMIZATION OF TECHNOLOGY TO CONTROL
DEVELOPMENT OF BITTERNESS IN DEHYDRATED
JAK FRUIT FLOUR**

A PROJECT REPORT PRESENTED BY

SAMINDA VAJIRA RANATUNGAGE
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To the Board of Study in Plant Sciences of the
POSTGRADUATE INSTITUTE OF SCIENCE

*in partial fulfillment of the requirement
for the award of the degree of*

**MASTER OF SCIENCE IN POSTHARVEST TECHNOLOGY
OF FRUITS AND VEGETABLES**

of the

**UNIVERSITY OF PERADENIYA
SRI LANKA
2010**

OPTIMIZATION OF TECHNOLOGY TO CONTROL DEVELOPMENT OF BITTERNESS IN DEHYDRATED JAK FRUIT FLOUR

Saminda Vajira Ranatungage

Postgraduate institute of Science

University of Peradeniya

Sri Lanka

Sri Lanka being a developing country, it spent about Rs.110 millions to import wheat flour of 2082.5 Mt. in the year 2008. In this situation, it is valuable if we can use considerable amount of jak flour with wheat flour to produce food products. It is useful to reduce the importation of wheat flour. So the demand for jak flour based products as a food is increasing in Sri Lanka. But there is a problem in jak flour that is bitter taste in it.

In this research study, the main aim was to investigate the possible factors of bitterness of jak flour and treatments to control the bitterness of stored jak flour which were processed. Research was done for processed jak flour using appropriate protocol. Different treatments were used for processed jak flour changing the blanching time, concentration of sodium metabisulphites and combine treatment of the above. Then the enzyme activity was checked for the processed flour using Peroxidase and Catalase tests. According to these results suitable treatment was found to control the development of bitterness of stored jak flour. Then another trial was carried out to check enzyme activity, microbial activity, moisture content and sensory evaluation for stored jak flour four month after storage.

According to the results, treatment of Blanching 100⁰C for 1 min. in 0.1 % sodium metabisulphites was the most suitable treatment for control of bitterness development of processed jak flour during the storage. The enzyme activity and microbial activity of stored jak flour was retarded due to the chemical and blanching treatment.