PERMANENT REFERENCE

DEVELOPMENT OF MAIZE - SOY BASED SUPPLEMENTARY FOOD AND EVALUATION OF QUALITY PARAMETERS

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A RESEARCH REPORT
SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE
ADVANCED COURSE

IN

FOOD SCIENCE AND TECHNOLOGY

FOR

THE DEGREE OF

BACHELOR OF SCIENCE IN AGRICULTURE

FACULTY OF AGRICULTURE
EASTERN UNIVERSITY, SRI LANKA

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....	Mahendran	Mahendran ....
Mr.T.D.W.Siriwardena Supervisor, Head, Soybean Food research Unit Gannoruwa. Peradeniya. Date: 11.01.2001	Dr.(Mrs).T.Mahendran Supervisor, Faculty of Agriculture Eastern University Sri Lanka. Chenkalady. Date: 15/01/2001	Dr.(Mrs).T.Mahendran Head/Dept. of Agronomy Faculty of Agriculture Eastern University Sri Lanka. Chenkalady. Date: 15/01/2001

HEAD
Dept. of Agronomy
Faculty of Agriculture
Eastern University, Sri Lanka.

PROCESSED

ABSTRACT

Throughout history, hunger and malnutrition, caused by a lack of nutrients or by poor health, particularly infectious diseases, which prevent the body from absorbing and utilizing food efficiently.

Studies were conducted to develop low cost nutritious Maize – Soy based supplementary food by using less capital intensive method. In addition, green gram and chickpea were added to increase the organoleptic properties and to enhance the consumer acceptability.

Proximate analysis indicated that the blend contains flours of maize, soybean, green gram and chickpea have high protein content and low fat content which is suitable for human consumption.

Sensory evaluation reveals that there is no significant difference among the developed blends. However, comparatively higher percentage of panelists selected the blend which consist flours of maize, soybean , green gram and chickpea as the best.

Moisture sorption studies were conducted to find out the ideal moisture level of the blend for long term storage. Based on the experiment the B.E.T (Brunner-Emmet-Teller) monolayer values were calculated at 30 ^{0} C and 40 ^{0} C temperatures and the values were 3.19 g moisture / 100 g dry weight and 3.05 g moisture / 100 g dry weight, respectively.

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