

COMPARATIVE STUDY OF DIFFERENT RIPENING
METHODS IN BANANA FRUIT

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MAHENDRARAJAH RAMESKARAN

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APPROVED BY

K. Premakumar,
Senior Lecturer and Supervisor,
Department of Agricultural Chemistry,
Faculty of Agriculture,
Eastern University, Sri Lanka.

K. Premakumar,
Senior Lecturer in Food Science & Technology,
B.Sc. Agric. (U.P.T., Madras), M.Sc. (A.I.T., Bangkok),
Ph.D. (IARI, New Delhi).

Date: 06/03/2009.

Dr. (Mrs)-T. Mahendran,
Head/Department of Agricultural Chemistry,
Faculty of Agriculture,
Eastern University, Sri Lanka.

Dr.(Mrs). T.Mahendran
Head / Dept. of Agric. Chemistry
Faculty of Agriculture
Eastern University, Sri Lanka.

Date: 06/03/2009.



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ABSTRACT

A research was conducted to compare the different ripening methods of banana. This study was carried out in two phases viz questionnaire survey and laboratory study. Kathali banana fruit and six different ripening methods were selected for the Laboratory study through the questionnaire survey which was conducted in three categories such as from consumer, sellers, and farmers. In the laboratory study, Unripened, mature Kathali banana fruits were ripened using smoking method, hydrated lime, gliciredia leaves and straw, ethapon, calcium carbide and natural ripening method. Nutritional analysis was carried out for titrable acidity, Moisture content, P^H , total soluable solid, ascorbic acid and total sugars to the fruits ripened by the different ripening methods. Physical analysis was carried out for weight of the pulp and dry matter percentage. The sensory test was done for taste, colour, texture, flavour, absence of off-flavour, and overall acceptability.

In nutritional analysis among the six treatments, the fruits ripened by the usage of the gliciredia leaves and straw had the highest titrable acidity, total sugar and P^H were 5.6186%, 14.8997% and 0.5896, respectively. Total soluble solid was highest in the fruits ripened by the usage of hydrated lime. Among the six treatments ascorbic acid content (0.004mg/100g) was highest in the fruit ripened by the usage of ethapon and moisture content was highest in the fruit ripened by the usage of smoking method. Under the nutritional analysis the fruit ripened by the usage of gliciredia leaves and straw had good nutritional values. The organoleptic test results revealed that there was significant difference in the usage of different ripening methods for flavour, taste, colour, texture, absence of off-flavour and overall acceptability. Banana fruits ripened by the usage of

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