

सी इ.पी.सी. प्रयोगशाला एवं तकनीकी विभाग C.E.P.C. Laboratory & Technical Division

CERTIFICATE

This is to certify that this dissertation entitled "Production and optimization of α -amylase using banana waste by Bacillus cereus under submerged fermentation" is a bonafide record of independent work carried out by Ms. MARIA MARTIN, M.Sc. Food and Dairy Biotechnology student, Fatima Mata National College, Kollam under the guidance and supervision of Dr. Rekha Sivadasan, Junior Scientist of this institute. It is further certified that she has independently reviewed the literature, performed all the tests, analyzed the results and critically discussed the findings in presenting data.

This is in partial fulfillment of the requirements for the Master's Degree in Food and Dairy Biotechnology of University of Kerala.

Kollam 01-06-2015 (Dr. C. Prabhakumari) Dy. Principal Scientist



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PRODUCTION AND OPTIMIZATION OF a- AMYLASE USING BANANA WASTE BY BACILLUS CEREUS UNDER SUBMERGED FERMENTATION

DISSERTATION

Submitted to the University of Kerala in partial fulfillment of the requirements for the award of the Degree of Master of Science

IN

Food and Dairy Biotechnology

Submitted by

Candidate name: MARIA MARTIN

Candidate code: 13 105 006

Exam code: 60212402

Subject code: FDB 403



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