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Physiochemical and phytochemical composition of banana central core juice and juice powder

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Musa × paradisiacal L is a perennial tree like herb valued as one of the most important fruit and vegetable crop. Due to its enriched food value and versatile medicinal value, a study was conducted to spray dry the central core juice using two different maltodextrin concentrations i.e., 0, 5 and 10 percent of the core material as encapsulating agent. Spray dried central core juice powders and fresh central juice were assessed for their physicochemical (pH, water activity, electrical conductivity and total soluble solids), phytochemical and micronutrient properties to study the affect of spray drying. Structure of the spray dried powders was studied with scanning electron microscopy. An increase in moisture, bulk density and decrease in hygroscopicity along with the increase in the concentration of maltodextrin was observed in spray dried juice powder. Phytochemical screening of fresh juice and juice powder shows the presence of biologically important constituents-flavonoids and phenols. Hence, banana central juice powder could prevent significant post harvest loss and in turn could be exploited to its fullest extent.

Biography

Krithika V has completed her PhD from Bharathiar University, Coimbatore. She has completed her PG Diploma in Psychological Counseling. She has published two books, six book chapters and about seven research, review and popular articles. She is currently working as an Assistant Professor in the Department of Food Processing Technology, PSG College of Arts and Science, Coimbatore-14. She has working experience in DST and MoFPI funded projects as research fellow and teaching experience as a guest lecturer. She has delivered lectures and provided training to self help group women, entrepreneurs, students and trainees.

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