

A Study of Technological Systems Employed in Banana Jam Agro-Industrial Units

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Appropriate banana processing is very important for the reduction of post-harvest losses. One of the most relevant products generated by banana processing in the agro-industrial context is banana jam. This product can be processed on both small and large scale. However, among the products available in the market, considerable variation in the final quality urges the need for the use of different technologies for better quality and homogeneous results. The major goal of this work was to identify processing variables among 49 processing units in the States of Minas Gerais, Parana, Sao Paulo and Santa Catarina, Brazil, that may result in poor-quality banana jam. Variables analysed were banana varieties, ripening point, technological systems, use of additives and main obstacles. The 'Nanicao' variety was the favourite one in more than 50% of the processing units, but during the off-season 'Prata' and 'Marmelo' were also processed. The majority of processing units do not use any controlled ripening procedure, and they use bananas that are fully matured when processed. Among the legally allowed additives, the most common were acidulants (47%). Conservants ascorbic acid, benzoic acid and its salts were used in 13% of the processing units. Thickener (pectins) was used only in 6% of the total units. Most concentrators are made of copper (45%). The average cooking time was 2 hours. Major obstacles observed were related to quality and quantity of raw material and final product concentration. The quality of banana jams can be significantly improved by the adoption of some technologies and procedures as the control of ripening and the use of thickeners to standardize concentration and decrease cooking time.