THARVEST AND PHYSICO CHEMICAL PROPERTIES OF ENCELSA AND LIBERICA COFFEE IN CAVITE

THESIS

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ABSTRACT

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The study "Physico-Chemical Properties of Excelsa and Liberica Coffee in Cavite, was conducted at the Institute of Food Science and Technology Laboratory from January to February 2003. Specifically, it aimed to characterize Excelsa and Liberica coffee in Cavite referred to as Cavite barako, in terms of postharvest and physical properties such as bulk density, bean color, defects and bean size. The study also determines the caffeine, sugar and moisture content of Cavite barako. Such physical-chemical properties were used as bases for grading the coffee samples using the Speciality of Coffee Association of America (SCAA) Green Coffee Classification and Grading Procedure. The Cavite barako samples were also compared to Batangas barako in terms of physical and chemical properties. Cavite barako coffee samples, which are mixtures of Excelsa and Liberica green coffee from five municipalities of Cavite, were used as representative samples.

Results of physical analysis show that green Barako coffee beans from Cavite differed in terms of bulk density, color, defects and bean size. The study also revealed that based on the SCAA grading system Cavite barako was below standard due to varying bean size and presence of significant number of defects. Batangas barako was likewise, found to be below standard. Significant differences were observed among Cavite barako samples in terms of moisture, sugar and caffeine content.

Among the postharvest practices identified, harvesting, trimming and sorting were considered potential factors which could have affected the physical properties and quality grade of the Cavite barako green coffee beans.

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INTRODUCTION

Among the four widely used cultivated species of coffee in the Philippines, Liberica is characterized by a very strong pharmacopical taste and flavor while Excelsa is best identified by its very appetizing taste. These properties fascinate the interest of a number of researchers to conduct studies on characterization and quality improvement of Liberica and Excelsa coffee. Considering that a large portion of coffee development was already appropriated for Arabica and Robusta varieties efforts could also be exerted toward the development of Liberica and Excelsa coffee.

In addition to varietal and cultural management improvement, information on the postharvest characters of coffee can significantly contribute to the identification of optimal conditions for the production of quality Liberica and Excelsa coffee. Physical