Descriptive Sensory Analysis and Portuguese Consumer Acceptability of Bissap Hibiscus Drinks with African Origin

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\textit{Hibiscus sabdariffa} commonly known as Roselle is a species of \textit{Hibiscus} native from the Old World tropics and grown in many tropical and subtropical countries. The swollen calyxes are the part of the plant of commercial interest as they are rich sources of vitamin C, phytochemicals, and are also used for making a variety of products including juices, food colorants and jam. Food industry has long recognized that sensory quality is one of the most critical aspects of consumer's acceptability and sales. The objective of this study was to determine the sensory profile of Bissap \textit{Hibiscus} drinks (n=4) made from infusions of red calices, syrup and instantaneous juice, using Quantitative Descriptive Analysis (QDA) methodology. Sensory profiles of selected drinks were determined using a trained panel (n=7) and an established Bissap drink sensory language. Principal Component Analysis (PCA) was used based on QDA results. Samples were evaluated for consumer acceptability in central location of campus of Portuguese Catholic University. Consumers (n=100) assessed the Bissap drinks for overall liking and other consumer attributes. The sensory profile obtained reveals that samples produced from calices are represented by hay, Hibiscus flower and cold black tea descriptors, the syrup by sweet and instantaneous juice by raspberry, attributes. Consumers acceptability in terms of global appearance are divided into two groups, the first one with syrup and instantaneous juice samples and the second one with samples obtained by calices, in a decrease order of acceptability (according Tuckey's test).