ABSTRACT

Cocoa bean shell waste is a byproduct of cocoa processing that has potential applications in a variety of industries including food and beverage, agriculture, and wastewater treatment. Cocoa bean shell waste contains a high concentration of antioxidants and has been investigated as an ingredient in foods such as cakes and brownies. As a result, the report focuses on the utilization of cocoa bean shell waste in chocolate cookies as a substitute for natural cocoa powder. The study examined three samples: one containing 100% existing natural cocoa powder, one containing 50% natural cocoa powder and 50% cocoa bean shell waste, and one containing 100% cocoa bean shell waste powder. All of the samples were made using the company's standard recipe. The extraction of cocoa bean shell waste during the winnowing process was described as part of the process of making chocolate from cacao beans. A group of 30 people rated the chocolate cookies on a 9-point hedonic scale for various aspects (color, taste, flavor, crispiness, sweetness, and bitterness) and a 5-point JAR scale for intensity (sweetness and bitterness). According to the sensory evaluation results, the combination of cocoa bean shell waste and natural cocoa powder improved the sensory parameters of the chocolate cookies. The most important factor influencing overall liking was discovered to be taste, followed by color, aroma, and crispiness. More research is needed, however, to determine the best ratio and application of cocoa bean shell waste powder and natural cocoa powder in the manufacture of chocolate cookies.

Keywords: Cocoa bean shell waste, Natural Cocoa powder, Chocolate Cookies, 9-point hedonic scale, 5-point JAR scale