Characterisation and sensory evaluation of four melon (lerotse) varieties for suitability in jam processing


The lerotse and the watermelon are the common local melon varieties in Botswana. The lerotse or lekatane, as known to the inhabitant of Botswana are believed to have stemmed from the wild tsamma melons of the Kalahari. They have been widely utilised for income generation through a variety of indigenous processes. More than 30 varieties of these have been found in the country and this study characterised four of the commonly used varieties and explored their utilisation in jam processing. Raw melons were measured for their overall weight, pH, °Brix, circumference, height, moisture content, rind size and number of seeds. Packed in poly-ethene bags, vacuum sealed separately and then stored at -16°C. Round stripped green (A), round whitish green (B), oval whitish green (C) and round dark green (D) melon varieties were used. After processing pH, °Brix, weight of pulp and %yield were recorded. Descriptive Sensory was conducted (colour, gloss, aroma, spreadability, smoothness, overall taste and overall liking). Consumer acceptance was conducted throughout the country. Varieties A and D gave the highest yield °Brix and pH (p>0.05). The A variety had the lowest moisture (91.8%) and was liked best in all attributes. Variety A had 72% overall acceptability.