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THE EFFECT OF PROCESS TRADITIONAL METHOD ON THE CHEMICAL COMPOSITION OF CAPE GOOSE BERRY JAM

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Cape Goose Berry (CGB) has been taken increasing interest of scientists and consumers in recent years due to its health promoting potential. In literature there were few studies focusing on this plant material and its constituents and no information about its potential value-added products have been seen according to our best knowledge. Thus, in this study, it was aimed to produce CGB Jam processed through traditional method as an alternative product for consumers. The physical and chemical contents of fruits and jam were determined to figure out jam production effects. For this purpose, moisture content, pH, titratable acidity were measured as physical properties. Measurement results showed that dry matter amount increased 42.5%. Titratable acidity also increased approximately 11.76%. Titratable acidity was measured as citric acid being dominated organic acid in CGB. pH measurement displayed no significant change in pH of jam and raw berry fruits being around 4.7. Total phenolic, total carotenoid and ascorbic acid amounts were also determined. The results indicated severe decreases in amounts of phenolics, carotenoids, and ascorbic acid of jam compared to the raw fruits' ones. Loss in phenolic content was found to reach 45% of its initial level in unprocessed berries. Similarly, reductions in total carotenoids and ascorbic acid of jam compared to those in raw fruits were found to be 75% and 45%, respectively. As a conclusion, CGB jam is a good alternative product for consumption of this valuable plant material, although losses in its constituents were seen after process.

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