

## THE EFFECT OF PROCESS UNDER VACUUM ON THE CHEMICAL COMPOSITION OF CAPE GOOSE BERRY JAM

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Cape Goose Berry has been taken increasing interest of scientists and consumers in recent years due to its health beneficial potential. In literature, although there were few studies focusing on this plant material, alternative goose berry based product was not seen. In the light of this missing point it was thought that production of Cape Goose Berry jam may be a good example towards filling this gap, so its production under vacuum was planned in this study and process effects on chemical constituents of jam were investigated. For this purpose, moisture content, pH, titratable acidity as physical properties were measured. Measurement results indicated an increase in dry matter amounts by 15.75 % of its level in raw fruits. Titratable acidity was measured as citric acid being dominated organic acid in cape goose berry, and found to increase by 33.96% compared to that level for unprocessed fruits. None significant change in pH of goose berry fruit was observed and its level was found be in the range of 4.6 to 4.7. Total phenolic content, total carotenoid and ascorbic acid amounts were also determined. The results indicated decreases in amounts of chemical constituents of jam compared to unprocessed raw fruits' ones. Loss in phenolic content was found to be 65% of its level measured for raw berry fruits. Similarly, severe reductions in total carotenoid and ascorbic acid contents of Goose berry jam were seen and they were calculated as 42% and 22% of their levels in raw berries, respectively. Although reductions in some constituents of Goose Berry fruits were seen, it could be say that this product has a potential for alternative in food market for this fruit.

Keywords: Titratable acidity, phenolics, carotenoids, ascorbic acid

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