

EFFECTS OF BOILING ON THE PROXIMATE ANALYSIS AND MINERAL COMPOSITION OF THREE SPECIES OF GARDEN EGG

(Solanum aithiopicum, Solanum aubergine and Solanum anguivi)

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ABSTRACT

Three species of garden egg namely *Solanum aithiopicum*, *Solanum aubergine* and *Solanum anguivi* processed into raw and boiled powdered flour, samples were taken for their nutritional and mineral components using standard analytical methods. Proximate composition determined include total ash, moisture content, crude fibre, crude protein, crude fat and carbohydrate by difference, the mineral components determined are P, Fe, Mg, Na, Mn, Zn, Ni and Cu. The proximate analysis 92.40%, and the raw sample has the values of 12.31 ± 0.01 , 10.32 ± 0.025 , 6.83 ± 0.031 , 3.20 ± 0.059 , 4.27 ± 0.015 and 63.08 ± 0.035 for its protein, moisture, fat, ash, crude fibre and carbohydrate respectively. The values carbohydrate of the raw sample of *Solanum aubergine* was also found to be 12.49 ± 0.01 , 9.47 ± 0.01 , 6.71 ± 0.01 , 3.43 ± 0.01 , 4.19 ± 0.01 , 63.7 ± 0.01 respectively. The values moisture, fat, ash, crude fibre and carbohydrate of the raw sample of *Solanum anguivi* was also found to be 12.32 ± 0.02 , 8.87 ± 0.01 , 6.79 ± 0.01 , 3.47 ± 0.01 , 3.11 ± 0.01 and 65.4 ± 0.02 respectively. The mineral component potassium composition with the value of 5.113 ± 0.003 while the potassium composition of boiled *Solanum anguivi* is 5.055 ± 2.857 . The value of phosphorus composition *aithiopicum*, *Solanum aubergine* and *Solanum anguivi* are 7.209 ± 0.002 , 29.896 ± 0.002 and 5.4068 ± 0.002 *aithiopicum*, *Solanum aubergine* and *Solanum anguivi* are 5.7058 ± 0.002 , 14.417 ± 0.003 and 2.783 ± 0.002 respectively. Most of the nutrients content were reduced after boiling, these results show that boiling reduces the nutritional contents of *Solanum aithiopicum*, *Solanum aubergine* and *Solanum anguivi* but the difference is very minimal.