Comparative Nutritional Analysis of Paste Developed from *Tricosanthes Cucumerina Linn* and *Lycopersicon Esculentum L. Mil*l. in Nigeria

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Introduction

Tricosanthes cucumerina Linn., also known as snake tomato, is one of the indigenous underutilized vegetables found in South-Western Nigeria and is used in rural areas as a substitute for vine tomato (*Lycopersicon esculentum* L. Mill.) due to its sweet tasting, aromatic, and deep red endocarp pulp. Little attention is being paid to this crop despite its rich nutrient content and ease of cultivation.

Objectives

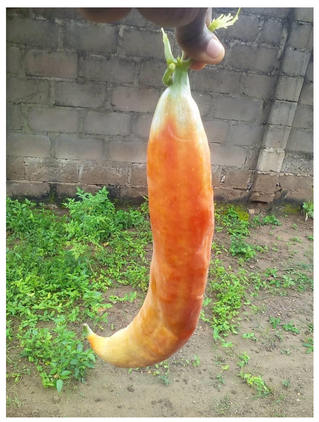
- ❖ This study explored the potential of the crop in the development of tomato paste
- ❖ The beta-carotene, lycopene, vitamin C and mineral content of snake tomato paste was compared to that of vine tomato paste.

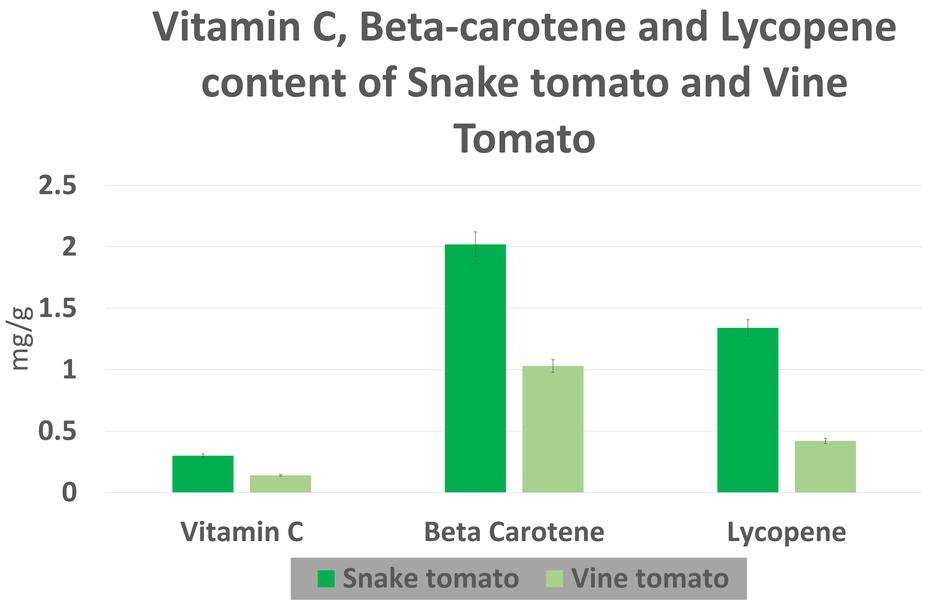
Methods

The fully ripe fruits of the two vegetables were harvested from a local farm in Ibadan, Nigeria. The pulp of the snake tomato was extracted, concentrated, poured into a sterilized glass jar and corked. As for the vine tomato, wholesome fruits (roma variety) were washed, milled, concentrated, poured into sterilized glass jars and corked. All laboratory analyses were done using standard procedures

Conclusion

Paste from snake tomato had significantly ($P<0.05$) higher content of β-carotene, vitamin C , lycopene and minerals than paste from vine tomato, except for sodium. These essential nutrients contained in snake tomato make the fruit and its paste of nutritional and health importance. Thus, it can serve as a good substitute or complementary raw material for tomato paste industry.





Mineral content of snake and vine tomato paste

Mineral content (mg/100g)	Fe	Zn	CA	K	Na
Snake tomato	3.44*	0.86	13.38*	320.25*	59.2*
Vine tomato	2.69	0.24	12.01	179.6	6.35

^ Significant difference between snake and vine tomato paste ($p<0.05$)

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