Utilization of traditional processed and preserved cowpea leaves in the Coastal Region of Kenya

Owade J.O.¹, Abong’ G.O.¹, Okoth M.W.¹ and Mwang’ombe A.M.¹
University of Nairobi, P.O. Box 29053-00625, Nairobi, Kenya

Introduction

- Cowpea leaves (Fig 2) are some of African indigenous vegetables that have been utilized as food in sub-Saharan Africa.
- Traditional preservation and processing of the vegetables help minimize their postharvest losses¹.
- Efficiency of traditionally preserved forms in promoting utilization of the vegetable is yet to be determined.

Study Objective

- To determine the contribution of traditional processing and preservation in improving utilization of cowpea leaves.

Materials and Methods

- Cross sectional survey was conducted in Taita Taveta County, Kenya.
- Sampling of 205 households. Done as shown in Fig 1.
- Data collection tools: Semi-structured questionnaire.
- Statistical analysis: Logistic regression, odds ratio and frequencies.

Results

- Household head: 66.8 were males whereas 33.2% were females.
- Average age of heads of cowpea producing households was 50.18±16.22 years.
- Average size of cowpea producing households was 3.42±2.2 persons.
- Three-quarters of the households prioritized cowpea leaves as a vegetable (Fig 2).
- Dried cowpea leaves was the second most consumed form (Fig 3).
- Traditional processing practised among the households were:
  - Sun-drying:73.9% 
  - Blanching:27.3%
  - Sun-drying and blanching: 54.1%
- Sourcing cowpea leaves from roadside vendors in-season increased the odds of utilizing dried forms off-season (Table 1).
- Seed scarcity and low pricing of the vegetables in the market increased the chances of drying the leaves (Equation 1).

Discussion

- Sun-dried vegetables can keep up to a year with less no visible signs of deterioration.
- Constraints and challenges in production result in reduced production quantities². In as much as sun-drying can enhance availability of the vegetable, only limited quantities can be dried and stored.
- The technique of sun-drying is more adaptable and cost-effective, however, it yields less quality product³.

Conclusions

- Use of sun-drying enhanced utilization of cowpea leaves during off-season.
- Challenges at production level constrain the practise of sun-drying in the area.

Recommendation

- The technique of sun-drying can easily be scaled up due to its affordability to increase availability of cowpea leaves among rural communities.

References


Correspondence
Owade Joshua Ombaka
University of Nairobi
Email: owademj@gmail.com
Website: uonbi.ac.ke
Phone: +254726307968

Acknowledgement
The authors would like to acknowledge the Fruits and Vegetables for all Seasons (FruVaSe) for funding the research, the University of Nairobi and the Dawuka Self-Help Group (Taita Taveta County, Kenya).
Presented at TropeTagr
Kassel, Germany