

Sweet potato research and development from the University of Cape Coast and Central region

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INTRODUCTION

School of Agriculture, University of Cape Coast has conducted many studies in support of sweet potato cultivation and utilization, these studies can be grouped into:

- Agronomy
- Protection (Pathology and Entomology)
- Breeding
- Post-Harvest engineering

In all there are more than 20 different studies

Summary (Contribution to knowledge)

- Agronomic performance of five improved and three local varieties of sweet potato in the coastal savannah zone revealed that TIS 84/3017 and TIS 86/3017 are superior while the less superior varieties are Cape Coast and Sauti
- Weed control, critical period of weed competition and control in sweet potato is found be between 20 and 45 days after planting
- Improved variety (TIS 84/3017) is more responsive to fertilizer than local variety.

- Intercropping sweet potato with marigold significantly controlled sweet potato weevil
- Determination of dry matter content of sweet potato tubers can be done by using the equation

$$Y = 130.25 + 152.95 X$$

where


X = specific gravity

Y = Dry matter content of sweet potato

- Re-ridging every 2 weeks reduced drastically the Cylas damage

Other areas are:

- Determining the shelf-life of sweet potatoes at different fertilizer rates, it was found out that accessions TAG/03/014 and DOS/03/008 stored better than DOS/03/036, BOT/03/028 and TAG/03/017
- Effect of length and position (proximal or distal) of cuttings on growth and development of emerged shoot in sweet potato, it was found out that;
- Effect of time of harvest on tuber yield and quality of sweet potato
- Intercropping sweet potato with marigold to control sweet potato weevil

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- The performance of some varieties of sweet potato in the coastal thick zone of Ghana
 - Effect of different rates of NPK (15-15-15) compound fertilizer on the yield of sweet potato, the study revealed that
 - Effect of weeding on yield of sweet potato
 - Agronomic studies on sweet potato in two districts of the Central region.
 - Performance of sweet potato in different agro-ecologies in Ghana
 - Developing appropriate storage technology for sweet potato in the coastal savannah zone of Ghana

On-going research:

- Characterization of sweet potato
- Identification specific species of Cylas infestation
- Entopopathogenic fungal identification of sweet potato Cylas
- Sweet potato water requirement for increasing yield
- Effect of deficit irrigation on the shelf-life of sweet potato



THANK YOU