WACCI's Vegetable Innovation Lab (VIL)

Agyemang Danquah, PhD
Coordinator, Teaching Programmes & Curriculum Development
West Africa Centre for Crop Improvement (WACCI)
University of Ghana, Legon

June 25 - 26, 2015



Some popular vegetables in Ghana



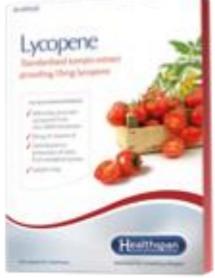
Uses of tomato



















What is VIL?

About VIL

Development champion
Platform for all VVC actors
Hub for R&D
Influence in Ghana & WCA

Government agencies

VIL

WACCI's role

Coordinating unit
Resource mobilisation
Education & Training
Research

Private industry

Research institutions

VILs objectives

- domesticate and bring into modern agricultural systems, a number of selected AIVs
- increase farmers' access to quality vegetable seeds in WCA
- increase the productivity, adaptability and quality of selected cultivated vegetables in WCA through modern breeding approaches
- enhance human capacity in vegetable breeding, production, processing and marketing

VILs objectives

- create a platform for engaging the drivers of the value chain, both public and private stakeholders, in discussions for sustainable production and marketing of vegetables
- establish an electronic knowledge based platform for sharing information and resources
- influence policy for research and development of vegetables in the sub-region

Our vision

Strategic Partnerships
Education & Outreach
Cutting-Edge Research
Climate Resiliency
Food & Nutritional Security



"improve food and nutritional security in WCA through increased utilisation of indigenous and cultivated vegetables"

- Prof. Eric Danquah, Director WACCI

Thematic Areas

Genetic Improvement

Vegetable Production and Quality

Processing

Value Chains & Socio-Economic Research

Policy Research

Knowledge Management Systems













Genetic Improvement

 Development of heat tolerant, high yielding and consumeracceptable tomato varieties for off-season production in Ghana

Dr. Agyemang Danquah, Department of Crop Science, UG

Tomato genetic improvement for enhanced yields under salt and osmotic stresses

Dr. John Eleblu, Biotechnology Centre, UG

 Genetic analyses of productivity traits in tomato for improved adaptation to low input production conditions

Leander Dede Melomey, WACCI PhD Student & CRI

Genetic Improvement

 Germplasm assemblage &management and Vegetable musuem at the WACCI farm for short-term programmes, teaching, learning and research

WACCI and others

Demand-led Vegetables breeding (Tomato, Africa eggplant & chinensis pepper); PhD and MPhil training

WACCI, Rijk Zwaan Afrisem & WUR Plant Breeding

Multi-locational trials of the hybrids of some selected vegetables
 Robert Berlin, SFSA & CRI

Value Chains & Socio-Economic Research

 Ghana tomato value chain preliminary study report: Gaps and key considerations to revamp the tomato industry

Dr. Irene Egyir, Ministry of Finance/Dep't of AgEcons & Agribusiness, UG

Vegetables product profiling

WACCI, GhanaVeg & Syngenta Company

Tomato market research

WACCI & SFSA

Partnering institutions

- Department of Crop Science, UG
- Forest and Horticultural Research Centre (FOHREC), UG
- Department of Agricultural Economics and Agribusiness, UG
- Institute of Applied Science and Technology (IAST), UG
- Crops Research Institute (CSIR), Ghana
- Horticulture Innovation Laboratory, UC Davis
- Seed Biotechnology Centre, UC Davis, USA
- AVDRC The World Vegetable Centre
- African Orphan Crops Consortium (AOCC)
- Syngenta Company
- Rijk Zwaan Afrisem

Expected output/outcomes

- Availability of seeds of new varieties from a range of AIVs and cultivated vegetables.
- Availability of indigenous vegetable production packages
- Availability of a series of advisory leaflets, production handbooks, manuals and publications in peer reviewed journals.
- Enhanced human capacity for vegetable breeding, production and protection in WCA
- Database for accessing information on vegetables
- Platform for engagement of stakeholders in the vegetable value chain
- Enhanced food and nutritional security in WCA

