

## **Communique on Key Emerging Issues**

### **1. Management of cassava brown streak disease (CBSD) in sub-Saharan Africa**

**Facilitator: Dr. James Legg**

#### *Summary of deliberations*

1. Since the end of the AMANI cassava breeding programme in the 1960s, CBSD has been a neglected disease.
2. There were no published records of CBSD in Malawi until surveys were conducted by NRI in 1998 when the disease was found to be widespread with high incidences (70 – 100%) in some areas.
3. Work conducted by NRI in Tanzania and Mozambique between 1996 and 2003, have highlighted the threat to food security imposed by CBSD. As a consequence CBSD has now become a priority for research within IITA. A number of donor organisations have agreed to support adaptive research for the control of the disease.
4. Despite the increased international effort to combat CBSD, there are many fundamental aspects of the basic biology of the disease that are not well understood. While strategic and adaptive research on CBSD is receiving increased funding, this basic research remains neglected.
5. Gaps in our understanding of some fundamental aspects of the aetiology and epidemiology of CBSD are an obstacle to speedy progress with disease control.

#### **Recommendations**

The meeting recommends that donors should support basic research on CBSD to provide the knowledge required to assist efforts to control CBSD through plant breeding. Four important aspects require attention:

1. Taxonomy of the virus: Presently the closest affinity is with the potyviruses with a non-definitive 40% sequence similarity. The possibility that more than one particle type is required for symptom expression has been raised.
2. Vector transmission: whitefly is the obvious candidate but transmission tests with both species have not been successful.
3. Factors influencing infection and symptom expression: what is the effect of soil type and climate – why is the disease confined to lowland areas of eastern Africa?
4. Relationship between above ground symptoms and root symptoms and distribution of the virus within the plant – does reversion occur?

## **2. Promotion of orange-fleshed sweetpotato to combat vitamin a deficiency in sub-Saharan Africa: VITAA (Vitamin A for Africa) Partnership Programme experiences**

**Facilitator: Dr. Fina Opio**

### *Summary of deliberations*

In sub-Saharan Africa, researchers from eight countries (Tanzania, Mozambique, Uganda, Kenya, Ethiopia, South Africa, Zambia and Ghana) in collaboration with the Root Crops Research Networks such as PRAPACE in East and Central Africa as well as SARRNET in the Southern Africa are working together under the banner of the VITAA to resolve the health problems of millions of children under age five who suffer from Vitamin A deficiency. The objective is to integrate in the diets to the greatest extent possible, the new high beta-carotene rich varieties that the body can use to produce Vitamin A. Lack of this essential micronutrient usually leads to a breakdown of the immune system and eventual death or blindness.

VITAA, winner of the 2003 CGIAR outstanding partnership award, met as part of the 13 Triennial Meeting of the International Symposium of Tropical Root Crops. VITAA represents an important opportunity for the countries of southern and eastern Africa to tackle one of their most pressing public health problems using existing technology that has proven to be both effective and sustainable. With modest resources, VITAA is putting into the hands of local communities orange-fleshed sweetpotato varieties. VITAA analyses from six countries has pointed to the high potential impact of replacing white fleshed sweetpotato varieties with high-dry-matter orange-fleshed ones. Scientists estimate that some 50 million children under the age of six stand to benefit.

VITAA's governance is provided by a Steering Committee made up of nutritionists, public health experts and agriculturalists from national and international research and development programs and NGOs throughout the region. Because VITAA recognises the importance of women in sweetpotato production systems, the Committee also includes an expert in the field of gender analysis. The Steering Committee meets annually and provides oversight and guidance to the VITAA Coordinator, Dr. Regina Kapinga, an International Potato Center (CIP) scientist. A session at the 13<sup>th</sup> ISTRC was devoted to OFSP which highlighted that VITAA has been particularly successful in:

- Bringing together different sectors to address a common problem.
- Increasing awareness of the potential of food-based approaches in combating vitamin A deficiency (VAD).
- Highlighting the acceptability of OFSP to a wide range of cultural groups

Discussions at the session put across a need to:

- Encourage farmers to produce OFSP in tandem with further developing the market.
- Build on successful efforts on producing planting material to make it more widely available.

- Widen the genetic base to build on progress already made, specifically, to incorporate weevil and virus resistance and improve on dry-matter content.
- Undertake additional bio-efficacy studies with other at-risk groups to build on those successfully conducted with primary school children.

The meeting explored opportunities to link to similar initiatives in Asia and highlighted the potential of OFSP in disaster mitigation.

For further on information on the VITAA initiative please contact: Dr. R. Kapinga, VITAA Coordinator, Email: [r.kapinga@cgiar.org](mailto:r.kapinga@cgiar.org), or visit the website: [www.cipotato.org/vtaa](http://www.cipotato.org/vtaa)