



A Letter from the SGI Chairman

Dear colleagues and funders to *icipe*,

Welcome to *icipe*'s fourth edition of the **SGI Quarterly** covering events in the last quarter of 2011. At the close of the year, *icipe* was granted renewed support from BMZ/GIZ and the African Union (AU) to continue implementing its Thrips Integrated Pest Management (IPM) Programme in Vegetables, as well as initiate a new complementary Thrips Grain Legumes Programme, respectively. Under the auspices of *icipe*'s Thrips IPM Programme, the Centre's scientists reported for the first time the occurrence of the onion thrips-transmitted Iris yellow spot virus (IYSV) disease in East Africa. We believe that among the most important contributions *icipe* can make to the advancement of science in Africa is to provide authoritative information on IPM. Prof. Zeyaur Khan, one of *icipe*'s most prominent scientists and leader of the widely-reputed Push-Pull Programme, has been named co-winner of the 2011 TWAS Prize for Agriculture. In December 2011 *icipe* and IITA signed a comprehensive memorandum of collaboration, paving the way for the two institutes to work more closely in the areas of integrated pest management, biological control and natural resource management with a particular emphasis on soil health. *icipe* is now closely involved in a new Public–Private Partnership (PPP) programme that will build up and support science and technology based PPPs in eastern and southern Africa. Lastly, read about *icipe*'s 40 years of science in Africa. Each of *icipe*'s achievements is a strategic milestone attained over the years in promoting a science culture and a science-based development agenda for Africa.

Best regards,

Dr Wolfgang Kasten – GIZ, Chairman SGI

Major Funding Event

***icipe* receives grant awards from BMZ/GIZ and AU to implement Thrips Integrated Pest Management in Vegetables and Grain Legumes respectively:**

In December 2011, *icipe* was granted €1.2 million by the German Federal Ministry for Economic Cooperation and Development (BMZ) under the auspices of GIZ to continue its **“Implementation of integrated thrips and tospovirus management strategies in smallholder vegetable cropping systems of eastern Africa”** programme. This is a multi-institutional effort to implement IPM strategies that are less reliant on chemical pesticides for thrips and tospoviruses control on crops like French beans, onions and

tomatoes in Kenya, Uganda and Tanzania, bringing together the collective expertise of world-class specialists from AVRDC (Taiwan), Leibniz University of Hannover (Germany), Martin-Luther University (Halle, Germany), Plant Research International (The Netherlands), Washington State University (USA) and *icipe*.

The additional African Union (AU) research grant will support the “**Validation and dissemination of bio-intensive eco-friendly management strategies for thrips – a critical constraint to cowpea production in Africa**”. The aim is to reduce crop damage due to thrips in target smallholder grain legume production systems in Kenya and Uganda through eco-friendly integrated thrips management strategies and capacity building among national agricultural research and extension system partners. *icipe*, in partnership with Kenya Agricultural Research Institute (KARI), Makerere University (Uganda), Horticultural Research and Training Institute (HORTI) (Tengeru, Tanzania), Plant Research International (The Netherlands) and Plant & Food Research (New Zealand) will validate and implement ecologically sustainable thrips management strategies that are less reliant on synthetic pesticides on grain legumes like beans, cowpea and dolichos. The two projects will officially be launched at the *icipe* Headquarters in March 2012.



icipe field experiments in KARI, Thika to evaluate effect of intercropping on French beans

Recognition

Prof. Zeyaur Khan was announced a co-winner of the 2011 TWAS Prize for Agriculture, for his leadership of the Push-Pull Programme:

Prof. Zeyaur Khan, the leader of *icipe*'s widely reputed Push-Pull Programme, was named co-winner of the 2011 TWAS Prize for Agriculture (<http://twas.ictp.it/news-in-home-page/news/twas-announces-2011-prize-winners?searchterm=Khan>). With this prize TWAS, The Academy of Sciences for the Developing World, honours individual scientists in developing countries for their outstanding contribution to the advancement of science. The TWAS Prize adds to Prof. Khan's growing list of accolades for his work as the leader of the Push-Pull Programme (<http://www.push-pull.net>). TWAS recognises Prof. Khan for his discovery and wide-scale implementation of the push-pull technology, a pro-poor scientific innovation for enhancing food security and environmental sustainability in Africa. Push-pull is now practised by more than 50,000 farmers in eastern Africa and was developed by Prof. Khan at *icipe* in collaboration with Rothamsted Research (UK), the Kenya Agricultural Research Institute (KARI) and various national partners in Africa. The Gatsby Charitable Foundation (UK) and the Kilimo Trust (East Africa) provided the initial funding. To date major supporters of push-pull include the European Union (EU), Biovision Foundation (Switzerland) and the McKnight Foundation (USA).



Prof. Zeyaur Khan and Mr Remjus Asewe Bwana, a push-pull farmer in Kisumu West District observing stemborers trapped in the Napier grass border crop. In the background, a flourishing maize and desmodium intercrop is seen. Prof. Khan has been announced a co-winner of the 2011 TWAS Prize for Agriculture, based on his leadership of the Push-Pull Programme

Important New Partnership

icipe and IITA sign MoC with a particular emphasis on soil health:

icipe and the International Institute of Tropical Agriculture (IITA) signed a memorandum of collaboration (MoC) late last year at *icipe*'s Duduville Campus in Nairobi. In an event attended by the new Director General of IITA Dr Nteranya Sanginga, *icipe* and IITA agreed to work together in the areas of IPM, biological control, and natural resource management with a particular emphasis on soil health. This research partnership paves way for a considerably strengthened research and development agenda between these two leading R&D centres in Africa (<http://www.icipe.org/news/556-important-new-partnership.html>).



Prof. Christian Borgemeister (L) and Dr Nteranya Sanginga (R) after signing the partnership agreement

Major Institutional Event

icipe celebrates its 40th birthday as the African Academy of Sciences (AAS) marks its 25th birthday. Both organisations were founded/co-founded by the late Prof. Thomas Risley Odhiambo, respectively:

November 2011 marked a very special month for *icipe* as we commemorated the 40th anniversary of the founding of *icipe* by the late Prof. Thomas Risley Odhiambo, not only the Centre's 1st Director but also one of Africa's leading scientists in the 20th century (<http://www.icipe.org/news/443-40-years-of-icipe.html>). TRO, as he was often referred to, steered *icipe* for more than two decades and left a lasting imprint on the Centre,

among others, by establishing the African Regional Postgraduate Programme in Insect Science (ARPPIS), an invisible college at *icipe* that trains PhD and MSc scholars from all over Africa (<http://arppis.icipe.org/>). The main event of the 40th anniversary celebrations was the *icipe* Science Day on the 16th of November, which was attended by more than 400 guests from Kenya and beyond (slide show <http://www.icipe.org/news/505-40-years-of-icipe-photo-gallery.html>). On this day the Centre's staff showcased *icipe*'s ongoing R&D programmes, ranging from the various IPM projects, to commercial insects, climate change research, integrated vector management of important disease vectors, etc. In addition, *icipe*, in partnership with Postal Corporation of Kenya, unveiled stamps in commemoration of the 40th anniversary. Similarly, AAS, on its 25th Anniversary paid homage to TRO, one of its founding fathers. Among the hallmarks of the celebrations was the jointly convened AAS–*icipe*–TWAS-ROSSA Conference on “***Climate Change and Food Security: The Road for Africa***” (<http://www.aasciences.org/new/index.php>). To conclude, *icipe* also hosted the 19th biennial conference of the African Association of Insect Scientists (AAIS) at its HQs in Nairobi (<http://aaisconference.icipe.org/>).



Hon. Alfred Khangati and Mr Eliud Lell after unveiling the stamps

Important Research Finding

icipe reports for the first time in East Africa, occurrence of Iris yellow spot virus (IYSV) transmitted by onion thrips:

The horticulture sub-sector in East Africa contributes around US\$ 1 billion annually to the value of exports. Smallholders produce more than 80% of the vegetables grown. Invasive thrips species seriously constrain production of vegetables. Apart from the direct damage they cause, they also vector virus diseases such as *Iris yellow spot virus* (IYSV) and *Tomato spotted wilt virus* (TSWV). *icipe* scientists have recently reported the first occurrence of onion thrips-transmitted IYSV in East Africa in *Plant Disease*, a journal published by the American Phytopathological Society (<http://apsjournals.apsnet.org/doi/abs/10.1094/PDIS-01-11-0057>). IYSV was found to inflict up to 75% leaf drying in onion and was prevalent in all onion growing regions of Kenya, Uganda and Tanzania. *icipe*'s Thrips IPM programme has built capacity to identify thrips and monitor tospoviruses for over 20 plant quarantine inspectors.



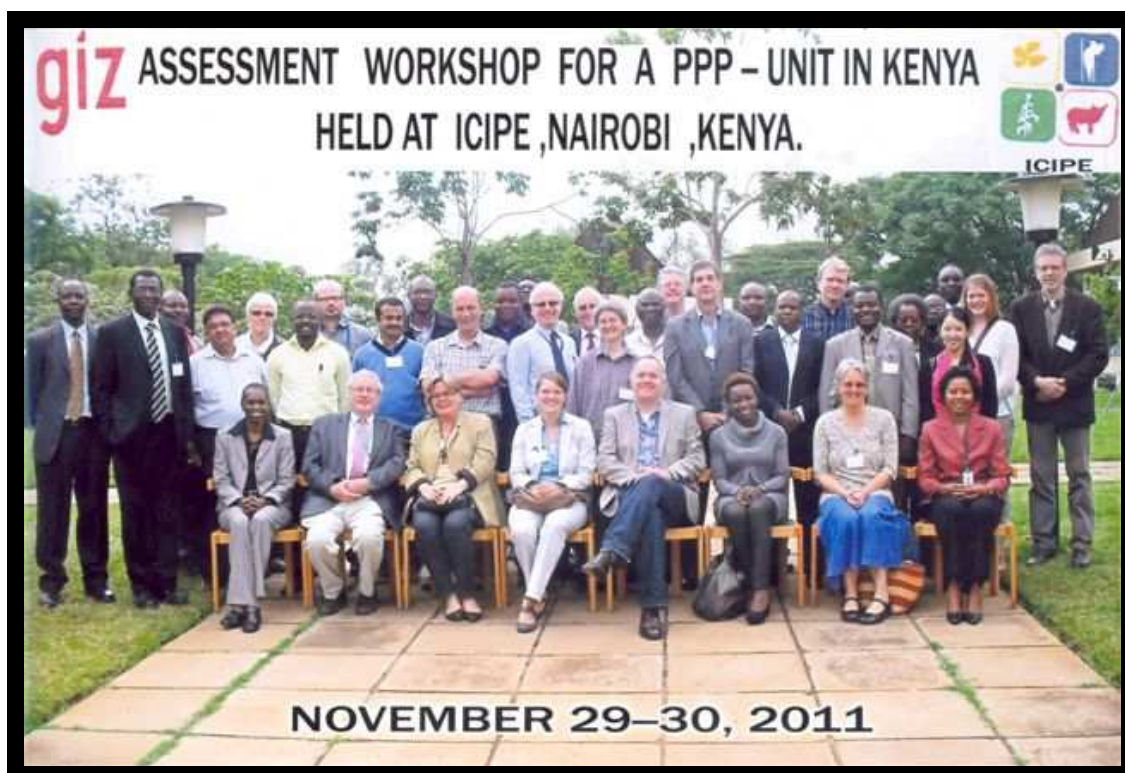
IYSV-ravaged onion field

Private Sector – *icipe* Involvement

icipe hosts the inaugural GIZ Public–Private Partnerships (PPP) Workshop:

Following discussions between the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and scientists from *icipe*, the World Agroforestry Centre (ICRAF), and the International Livestock Research Institute (ILRI) on the possibility of sharing some of GIZ's Public–Private Partnership (PPP) experiences with partners in Africa, a two-day PPP-Unit Assessment Workshop was organised, coordinated and hosted by GIZ and *icipe*, and co-hosted by ILRI and ICRAF. Participants were drawn from more than 20 research and private agribusiness institutions from Kenya, Ethiopia and Tanzania. At the end of the meeting participants agreed on the need to create a PPP-Africa facility that

would enable agricultural research centres to cooperate with African local companies, and build up and support science and technology based public–private partnerships in eastern and southern Africa. The programme should bring research centres’ outreach activities together in a PPP hub and synthesise existing forms of knowledge into applicable business ventures. The private sector would benefit through improved and early access to scientific knowledge and expertise, efficiency gains, and better public image and staff motivation. The initiative would also help build capacity for business development and identify new opportunities for science and technology applications. (More information at <http://www.icipe.org/pppunit/>).



Participants of the GIZ assessment workshop for a PPP Unit in Kenya held at icipe, Nairobi Kenya