

A half-day international workshop on Bambara groundnut (*Vigna subterranea* L) co-hosted by the Crop Research Institute of Ghana and Crops for the Future Research Centre (CFFRC).

1.30pm – 6.00pm on Tuesday 24<sup>th</sup> September 2013, Ellking Hotel, Accra

The workshop was an open meeting for anyone who had wished to attend and was an opportunity for the research community working on Bambara groundnut (and underutilised legumes in general) to discuss collaborative links. The workshop was organised with the aim to strengthen the international scope of the research effort and the dissemination of findings concerning this legume. This was an open pre-event to the 3<sup>rd</sup> Neglected and Underutilised Species Conference (NUS2013) which took place from September 25<sup>th</sup> to 27<sup>th</sup> at Mensvic Grand Hotel in Accra, Ghana.

The workshop kicked off with an introduction by Dr Sean Mayes, Programme Director for BamYIELD at CFFRC. In his introduction, Dr Mayes gave a brief overview of Bambara groundnut research over the years, stressing that underutilised crops research is much more challenging compared to research on major crops and ended by emphasizing the importance of collaboration for Bambara groundnut research



Following Dr Mayes was Dr Joe Berchie, representing CSIR Ghana as co – host for this workshop. He used his presentation to bring participants up to speed on Bambara groundnut research in Ghana over the years, reiterating the important findings starting with research done by Doku and Karikari (1970's) through to current Bambara groundnut research efforts at CSIR and partner institutions.

*Dr Joe Berchie is a well-known research scientist in the field of Bambara groundnut*

Following on, Dr Mayes introduced CFFRC and its innovative research approaches for underutilised crops. He also highlighted the BamYIELD programme which focuses on a holistic approach for improvement of Bambara groundnut combining scientific research with end user driven, socio – economical and policy research projects. He reiterated the main aim of the workshop which is to form collaborative links to enable Bambara groundnut research to move forward and to avoid further dilution of information and available funds. Dr Mayes ended his presentation by providing the latest update from CFFRC regarding PhD and MRes opportunities, and current efforts of the BamYIELD team and partners to set up a multi – location field trial system in six locations; three in Africa and three in South East Asia.



*Dr Sean Mayes (Left) and Prof Sue Walker (Right) giving their presentations at the workshop*

Prof Sue Walker then provided the participants with an overview and updates from CropBASE programme, which aims to be a global web-based support tool and knowledge base for underutilised crop research and development. She highlighted the importance of a knowledge sharing platform that is dynamic, current and most of all user friendly. Prof Walker is currently the theme leader for agrometeorology and ecophysiology, and Programme Director for both CropBase and SystemPLUS at CFFRC.

After a quick introduction from all workshop participants including what they aimed to take from the workshop, a brief discussion and decision was made to resurrect the BamNET website which once served as a platform for research partners working on Bambara groundnut to share and disseminate their knowledge and experimental outcomes. For the short term solution, BamNET will be web hosted by CFFRC and managed by members of the BamYIELD team, and this will hopefully be up and running within the next few months

All participants decided that there were three main discussion groups in regards to Bambara groundnut research: genetics, breeding & agronomy (Group 1), socio economics (Group 2) and food engineering and product innovation (Group 3). Following the short tea/coffee break all participants broke into the respective groups. Lively discussion sessions ensued and the workshop ended with each group presenting their discussion and potential solutions.

Group 1 emphasised the lack of funding received for Bambara groundnut, the need to sustain the diversity of this legume, and the importance of conducting field trials that not only look at Bambara groundnut but also to compare it to other legumes in terms of traits such as yield, biological nitrogen fixation and growth in response to drought conditions. They also stressed that crop research should be undertaken to aid farmers improve their yield hence livelihoods, not for the sake of science alone. Therefore, breeding programs need to have an end game in mind before embarking on crossing and selection experiments. Much discussion also surrounded the set up and prospect of the multi-locational field trials under CFFRC's BamYIELD programme, with it being agreed that we should

aim to make the field sites linked through common material and also available to interested researcher, providing depth of disciplinary research.

Group 2 discussions centred around three main socio economic research problems related to Bambara groundnut: 1) perception and knowledge of farmers, marketers/processors and consumers 2) economics and value-chain analysis, and 3) policy and financing support. One of the main take home messages was the need for policy to assess support biases or otherwise for production and utilization of this legume whilst persuading funding agencies to give priority to Bambara groundnut research, production and utilization

The main objective of the discussions from Group 3 centred on improving the food value of Bambara groundnut through the use of technologies that would add value to end products, parallel to promotion of such highly nutritious products. In the end, 5 problem statement and possible solutions in relation to food processing were identified for Bambara groundnut: hard to cook (HTC) effect, attached seed coat which contributes to reduced de-hulling, presence of anti-nutritional factor, a very strong beany flavour and bioavailability of protein from raw to cooked product. The group also highlighted the need to identify target audience for end products, and the importance of a global survey to identify Bambara groundnut end products in each continent and country.



*The three representatives from each group presenting the discussion points for each group. (L to R) Dr Felix Dakora for Group 1 (Genetics & Breeding), Dr Mure Agbonlahor for Group 2 (Socio Economics) and Ms Adeola Adjare for Group 3 (Food Processing & Product Innovation)*



*CFIRC representatives with all the participants from the workshop.*

For further communication regarding the workshop and/or BamYIELD in general, please contact Ms Razlin Azman, Programme Support Manager for BamYIELD at [razlin.azman@cffresearch.org](mailto:razlin.azman@cffresearch.org)