

## African Orphan Crops Consortium Genomics Laboratory



## LGC and the African Orphan Crop Consortium (AOCC) expand co-operation to accelerate Marker-Assisted Selection

**XX June 2015, London, UK** – [LGC](#) and the [African Orphan Crop Consortium \(AOCC\)](#) expand their partnership, using LGC's proprietary genomic technologies to accelerate crop breeding for members of the AOCC. The AOCC is an international effort to improve the nutrition, productivity and climatic adaptability of Africa's most important food crops, helping to decrease the malnutrition and stunting rife among the continent's rural children. The African Orphan Crops Consortium (AOCC) was launched at the [Clinton Global Initiative \(CGI\)](#) annual meeting in 2011.

AOCC's goal is to sequence, assemble and annotate the genomes of 101 traditional African food crops, which will enable higher nutritional content for African society over the decades to come. This new multi-year agreement allows members of the AOCC to access the complete range of world leading Genomic services, powered by LGC's [KASP™](#) and [SNPLine™](#) genotyping technology, for accelerated plant breeding, and LGC's proprietary nucleic acid extraction technology, using [oKtopure™](#) and [Genespin™](#) extraction platforms, [Sbeadex™](#) and [Kleargene spin™](#) extraction chemistries, and LGC's [Plant Sample Collection Kit™](#). These technologies, coupled with over 20 years of experience resulting in extracting more than 10 million samples, have allowed LGC to develop proven high quality, low cost extraction protocols to deliver world leading outsourced genomics services.

African Orphan Crops are African food crops such as finger millet, spider plant and bambara groundnut, among many others that are primarily grown for subsistence as they are not commercially viable. This fact has led to their neglect. The 101 targeted crops are the 'back garden' crops of rural Africa, home to ~600 million people. This initiative aims to improve the nutrition, productivity and climatic adaptability of some Africa's most important food crops, helping to decrease the malnutrition and stunting rife among the continent's rural children.

*Marcus Wills, Commercial Director, Genomics, LGC, explains, "We are excited to be working with the AOCC to improve the nutrition, productivity and climatic adaptability of Africa's most important food crops. In keeping with LGC's vision of 'science for a safer world' this partnership covers design, development and validation of KASP™ genotyping assays which support plant genomics and breeding of critically important crops."*

*Dr Allen Van Deynze, AOCC technology lead, agrees, "LGC is a perfect partner for AOCC and its extensive African collaborators. This agreement provides low-cost genotyping for African breeders working on Orphan crops, allowing them to directly incorporate the latest technologies into their breeding programs"*

[www.lgcgroup.com/genomics](http://www.lgcgroup.com/genomics)

<http://www.mars.com/global/african-orphan-crops.aspx>

#### **Notes for editors**

Marcus Wills (LGC) and Allen Van Deynze (AOCC) are available for interview, by arrangement

#### **About LGC**

LGC is an international life sciences measurement and testing company with leading positions in growing markets. LGC provides a range of measurement products and services which underpin the safety, health and security of the public, including reference materials and proficiency testing, genomics reagents and instrumentation, and expert sample analysis and interpretation. LGC serves customers across a number of end markets including Pharmaceuticals, Agricultural Biotechnology, Food, Environment, Government and Academia.

LGC's headquarters are in London and the company employs over 2,000 people, operating out of 22 countries worldwide. Its operations are extensively accredited to international quality standards such as ISO/IEC 17025, GMP, GLP and ISO Guide 34.

With a history dating back to 1842, LGC has been home to the UK Government Chemist for more than 100 years and is the designated UK National Measurement Institute for chemical and bio measurement. LGC was privatised in 1996 and is now majority-owned by funds managed by Bridgepoint.

[www.lgcgroup.com](http://www.lgcgroup.com)

#### **About the African Orphan Crop Consortium (AOCC)**

The AOCC has raised approximately \$30 million in-kind contributions to date to support its work. Based at the World Agroforestry Centre, AOCC will train 250 plant breeders in genomics and marker-assisted selection for crops improvement over a five-year period. The work will drive the creation of improved planting materials that will then be offered to smallholder farms throughout Africa. All data produced by AOCC is publicly available. The AOCC is a partnership between BecA/ILRI (Nairobi, Kenya), BGI (Shenzhen, China), Ghent University (Ghent, Belgium), Google (Mountain View, USA), LGC (Hoddesdon, UK), Life Technologies (Thermo Fisher, Carlsbad, USA) Mars, Incorporated (Maclean, USA), New Partnership for Africa's Development (NEPAD, (Nairobi, Kenya), iPlant Collaborative (Tucson, USA), UC Davis (Davis, USA), World AgroForestry Centre (Nairobi, Kenya) and World Wild Life Federation, (Washington, DC).

<http://www.mars.com/global/african-orphan-crops.aspx>

#### **Product details**

LGC KASP™ genotyping services

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