

## A first for Africa: Establishment of KASPar SNP marker technology for wheat breeding

State-of-the-art marker technology known as KASPar, which identifies Single Nucleotide Polymorphisms (SNPs) between different plant lines, has been established in the lab of Dr Renée Prins, CenGen (affiliated with the University of the Free State), South Africa thanks to a grant from BBSRC under the Sustainable Crop Production Research for International Development (SCPRID) initiative.

The SNPlite Lite platform, a series of high-tech machines was installed at CenGen in June 2013. This is the first SNPlite Lite platform to be installed in Africa. A team from LGC Genomics spent 3 days at CenGen installing the equipment and training the research staff in the operation of this KASPar SNP marker system.

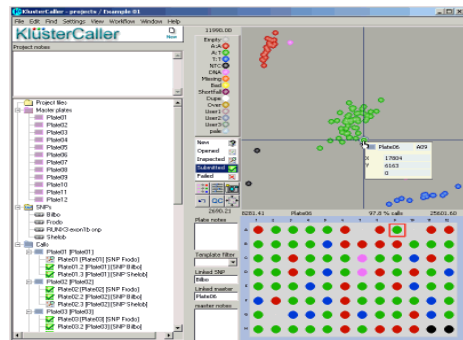
The SNPlite Lite platform will allow Dr Renée Prins, who already provides a marker service for the wheat breeding industry in South Africa, to offer this new SNP marker technology both to the research community and to crop breeders.



The team from LGC Genomics: Rhian Gwilliam, Renée Prins (CenGen) and Greig Pollard

The establishment of the KASPar SNP marker technology in South Africa will ensure that the crop breeding community will have access to the next-generation of marker technologies,

allowing the incorporation of cost effective markers into Marker-Assisted-Selection breeding strategies.



Typical KASP genotyping output  
(<http://www.kbioscience.co.uk/software/klustercaller/>)

The SCPRID project “Implementing effective marker technologies into disease resistance wheat breeding programmes within Africa”, builds on a long standing collaboration between Dr Renée Prins and Prof Zakkie Pretorius of the University of the Free State, South Africa and Dr Lesley Boyd at the National Institute of Agricultural Botany, Cambridge, UK.

### Acknowledgement:

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The CenGen team: Debbie Snyman, Cheryl le Roux, Elsabet Wessels, Lizaan Rademeyer, Hester van Schalkwyk, Renée Prins and Gloudi Agenbag