

Saving Cassava : A novel gene in a deadly virus

Supervisory team:

Main supervisor: Prof Gary Foster (University of Bristol)

Second supervisor: Dr Andy Bailey (University of Bristol)

Prof Titus Alicai (NACRI - Uganda), Prof Sue Seal (University of Greenwich-NRI)

Host institution: University of Bristol

Project description:

Cassava brown streak disease (CBSD), caused by the Cassava brown streak viruses (CBSV) causes losses up to 100% and typically >60-70% of root harvest in susceptible varieties, as well as substantial losses through reducing the market value due to necrotic lesions. CBSD has become an extremely serious constraint to cassava production in East Africa as well as a threat to cassava production throughout Africa.

CBSD is listed as one of the seven most dangerous plant diseases in the world for the impact it can have on food and economic security throughout Africa.

The aim of this PhD will be to carry out a detailed molecular analysis of a highly unusual gene found within the CBSV that is highly unique to these types of viruses. This PhD will join an international collaborative team working on vector-borne plant diseases in particular plant viruses and will be based in the School of Biological Sciences in the laboratory of Professor Gary Foster and Dr Andy Bailey and working in close collaboration with academics at University of Greenwich, and research groups across Africa.