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PP-7.5: The Guadeloupe Biological Resources Centre and its role in viral diagnostic and sanitation

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Since 2010, INRA and CIRAD have jointly set up the Biological Resources Centre (BRC) for ‘Tropical Plants’ in the French West Indies. The BRC is a germplasm repository, which carries out its activities with quality control procedures in the fields of acquisition, conservation and provision of plant material. The purpose of the BRC is to secure conservation of Banana, Mango, Pineapple, Sugarcane and Yam germplasm collections and to provide users such as research institutions, extension services and the private sector with healthy plant material. The BRC currently hosts a total of 1,800 accessions conserved in vitro and/or in the field, including 450 yam accessions belonging to the main cultivated species and wild relatives. Databases and a web portal (http://collections.antilles.inra.fr/) provide access to the conserved accessions and related information. Besides BRC’s core activities, scientific projects are developed aiming to enhance safety of plant material movements through sanitation and improved viral diagnostic. On yam species, the molecular diversity of the main viral families present in the germplasm is being analyzed, including endogenous viral elements. In addition, classical diagnostic methods are being optimized, taking into account the new data on viral diversity thus generated, with the objective to develop new multi-pathogen diagnostic methods based on metagenomics and deep-sequencing technologies.
‘to harness research innovations to unleash the potential of yam’