



Alliance



Phytosanitary certification of the Alliance of Bioversity International and CIAT germplasm health laboratory

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Introduction

The genebank of the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) called **"Future Seeds"**, located in Palmira-Colombia, preserves three world collections of basic food crops: beans, cassava, and tropical forages, with a total of 66,000 different materials originating from more than 140 countries.

In 2022, this building, a model in terms of sustainable architecture and state-of-the-art infrastructure, was inaugurated and became operational, being the first genebank in the world pursuing a LEED certification (Leadership in Energy & Environmental Design) platinum level certification, based on energy leadership and design environmental.

Future Seeds will serve as a genetic library using big-data technologies (digital passport information) that will allow plant breeders to develop new varieties of nutritious crops with adaptation to specific growing conditions globally, boosting the economy and technology.

The genebank produces, generates and distributes samples of seeds and in vitro plants to users such as farmers and researchers worldwide, completely free of charge. Since 1973, more than 500,000 samples have been distributed around the world.

A fundamental part of the conservation and distribution process is the Germplasm Health Unit (GHU), being responsible for guaranteeing the phytosanitary quality of the collections in custody. This GHU has a quality management system based on the ISO 17025 standard and is registered as a phytosanitary diagnostic and testing laboratory with the Colombian Agricultural Institute - ICA.

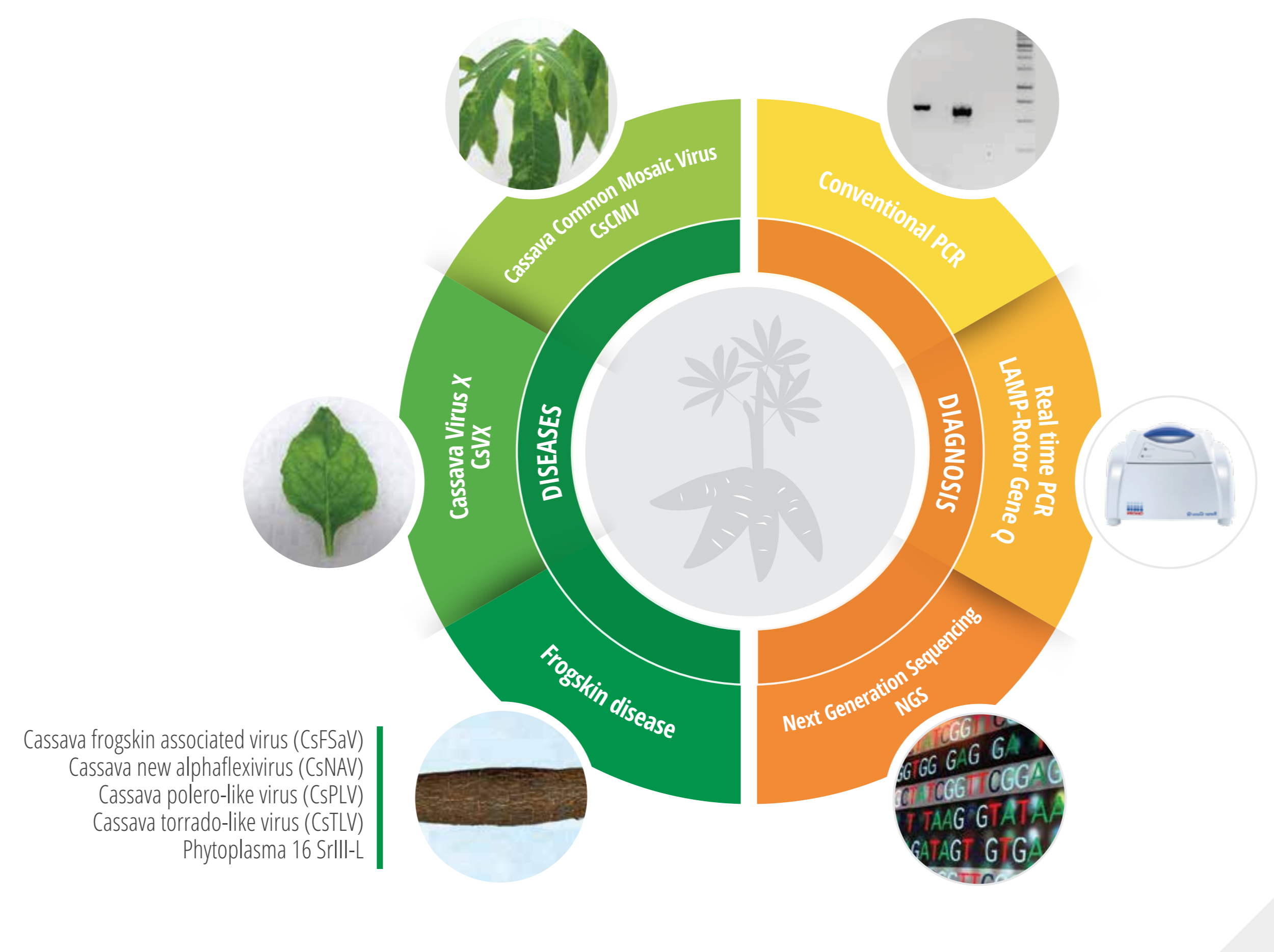
To guarantee diagnostic processes, the GHU is at the forefront in the standardization and innovation of high-sensitivity and specific methodologies for the detection of quarantine pathogens. Additionally, it is an integral part of the global network of Germplasm Health Units (GHUs) belonging to the 11 CGIAR genebanks, developing and implementing diagnostic methodologies and exchanging relevant information that guarantees the health quality of the collections.

All the material conserved by Future Seeds must be free of quarantine-type pathogens, thus complying with the phytosanitary quality for its distribution. For this reason, it is the responsibility of the Germplasm Health Unit to report on the phytosanitary status of the collections, contributing to the movement insurance of materials at national and international level.



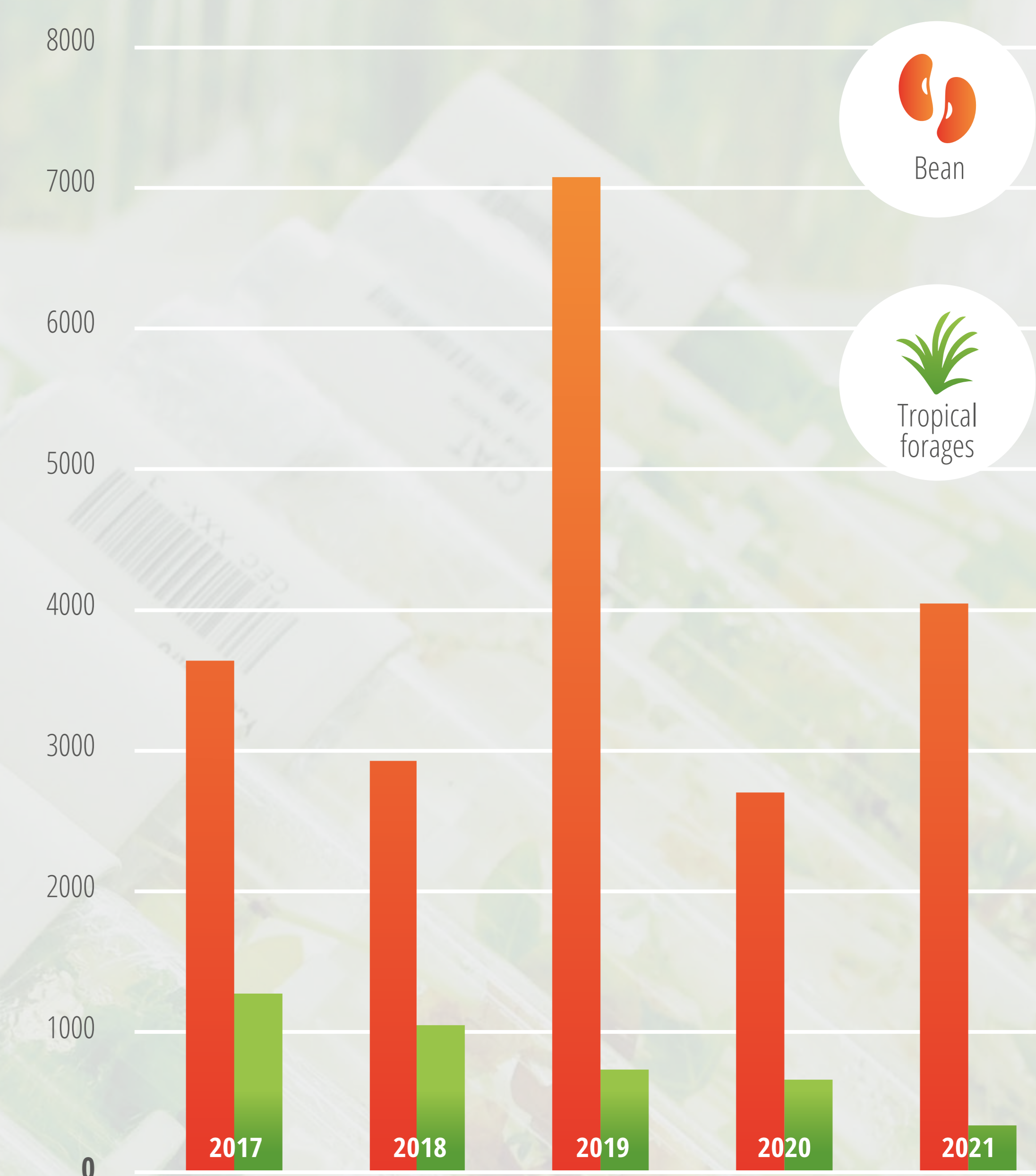
The Germplasm Health Unit – Alliance Bioversity International and CIAT

Sanitary Certification of Cassava Germplasm

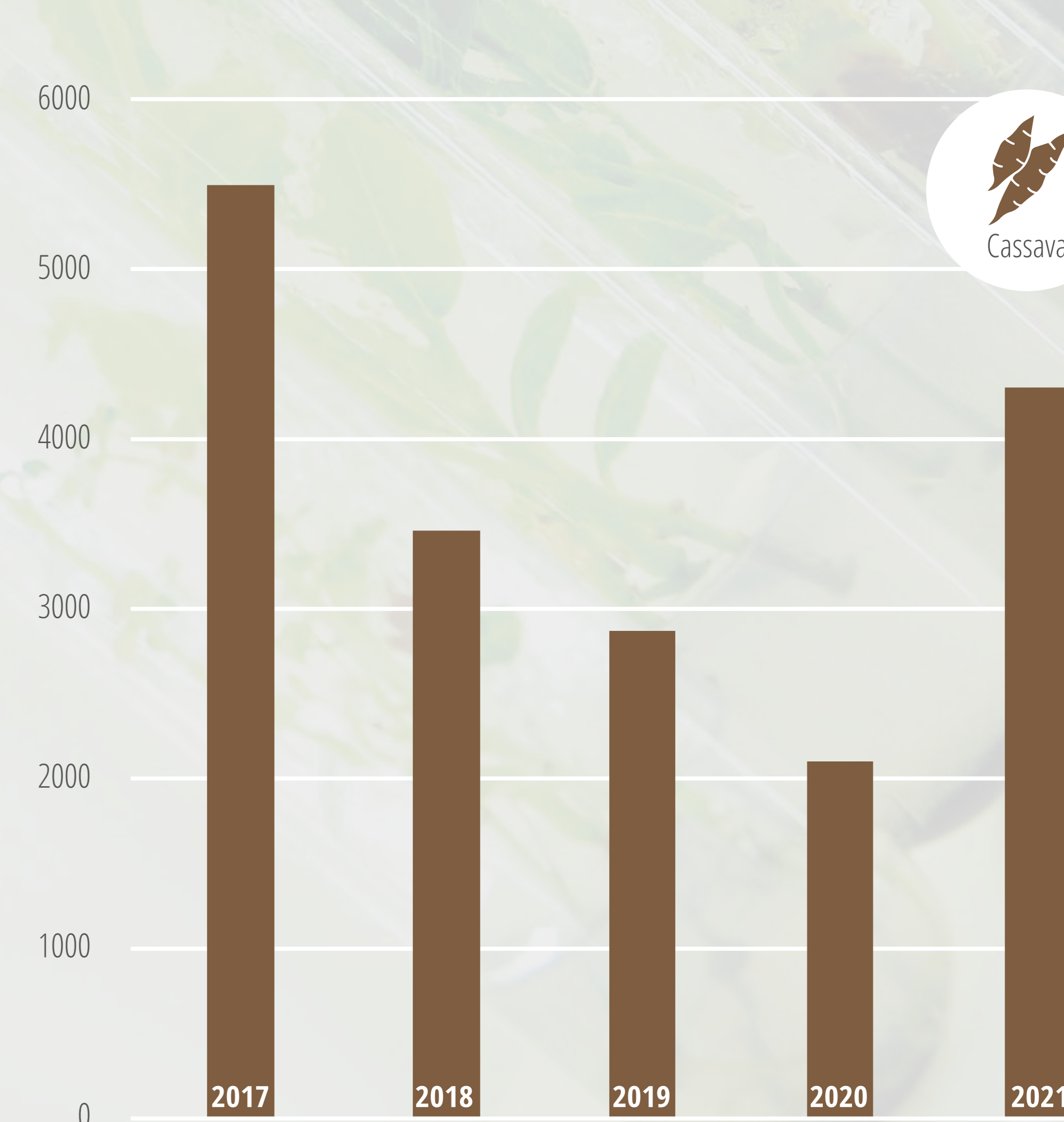


Cassava frogskin associated virus (CsfSaV)
Cassava new alphaflexivirus (CsnAV)
Cassava polero-like virus (CspLV)
Cassava torrado-like virus (CstLV)
Phytoplasma 16 SrIIH-L

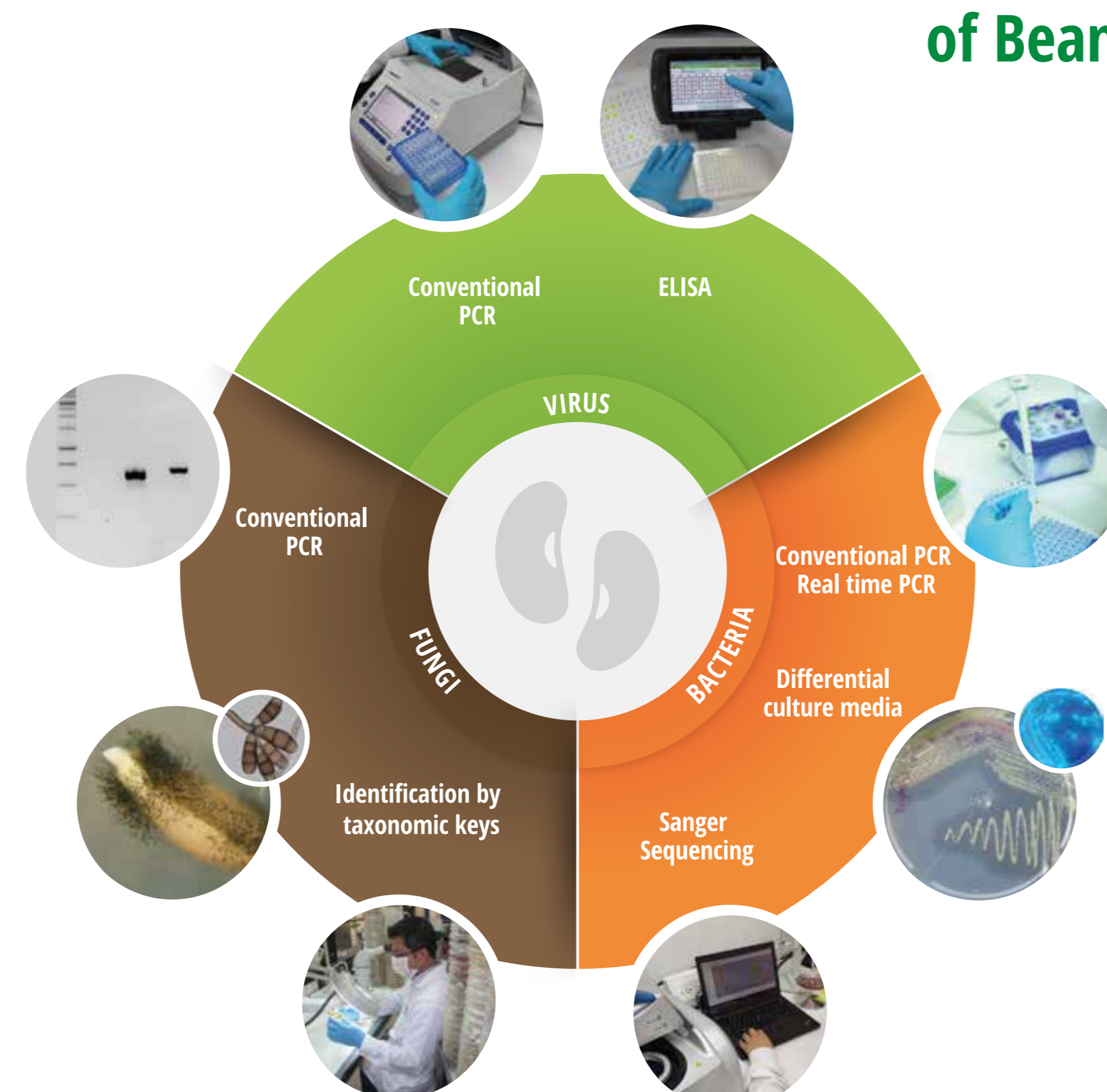
Seed accessions tested by GHU-CIAT period 2017-2021



Cassava accessions tested by GHU-CIAT period 2017-2021



Sanitary Certification of Bean and Forage Germplasm



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