

Progress in cassava core germplasm conservation in Thailand

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The systematic collection of locally grown material in all over the cassava growing areas of Thailand started in 1993. Formerly, maintaining in the field only and to ensure its long-term availability with low risk of loss contamination by pests or pathogens. In 2000, CIAT and DOA of Thailand have agreed on the establishment a program of cassava germplasm conservation for the another safe duplication of cassava genetic resources. In 2001, the Rayong Field Crops Research Center (RYFCRC) of Thailand have been received a duplicate set of the CIAT cassava core collection as *in vitro* plants with 2 tissue culture tubes for each clone. At present RYFCRC have been received 608 accessions for 2 years. The plant has been subcultured and preserved at RYFCRC. The *in vitro* collection, the cultures are maintained in under slow growth condition : 20 ± 1 °C constant temperature with 1000 – 3000 lux illumination during 16 hours a day provided by cool white fluorescent lamps, at 70-90% relative humidity. Three plants are grown in each 4.5x12 cm. glass tube containing a modified Morishige and skoog mediums developed at CIAT and 10 plants of each clone are routinely maintained. After multiplication the material have been transfer to greenhouse and then to the field. In the future, to evaluated for yield, starch content, morphological and physiological character, molecular , a high resistant to diseases and pests and the data that will be share with CIAT for the cassava germplasm database. Finally, we can assume that virtually all the additional economic effect generated by the higher fresh root yield of new cultivars and entering direct to the better living of small farmer.