

A COMMON BEAN GERMPLASM BANK AS SOURCE FOR RECOVERY OF CULTURAL RICHNESS

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INTRODUCTION

It is known that the scientific knowledge has ways of construction and application, which differ from those of the traditional knowledge. The first imposes itself as an absolute truth until the appearance of a new universal paradigm; the traditional knowledge frequently houses, equally with skepticism or confidence, divergent explanations, where validity is just local (CARNEIRO DA CUNHA, 2009). Manipulation of varieties of food plant species by indigenous groups is an example of a concrete expression of a simultaneously ancient and local knowledge.

Embrapa Temperate Climate (CPACT), located in Pelotas, Rio Grande do Sul State (RS), Brazil, an agricultural research institution, has been conducting works that deal with research-action with indigenous seed keepers, starting with those located at Terra Indígena Guarita Indian Reserve, located Northwest Rio Grande do Sul. Results from this first approach revealed that many landrace varieties (LR) used for food had been lost, mainly due to adverse climatic conditions (FEIJÓ et al., 2012).

More recently, CPACT amplifying its participation in relationship to the theme started a joint study with the Mbya Guarani group presently located in the Rio Grande do Sul coastal region. Preliminary talks have shown that the group had lost many LR, as had happened at Terra Indígena Guarita Indian Reserve. Among those, many common bean (*Phaseolus vulgaris* L.) LR.

The existence of a common bean germplasm bank at CPACT suggested the possibility of recovering of the lost landraces.

This article shows results obtained from such attempt.

MATERIAL AND METHODS

In order to give continuity to the activities related to the search for the lost Mbya Guarani varieties, eight Mbya Guarani farmers and three researchers from the Foundation for the Support of the University Extension and Research Services (FAPEU), Santa Catarina State, Brazil, on September 13, 2013, went to Low Lands Experimental Station (ETB), part of CPACT structure. On this day, the visitors were able to get acquainted with some of the work done at the institution involving research with landrace varieties and seed keepers, as well as with sustainability of family farms and social and economic development.

Specifically, before the start of the practice of selection of landrace varieties by Guarani farmers, it was established a dialogue with the participation of researchers and the Head of CPACT, in which it was achieved the institutional partnership. At the same meeting the agenda to be conducted on the day and the sequence of the work for the agricultural year 2013/2014, were discussed.

Prior to the beginning of the selection activity, it was explained to the farmers the way the seeds have been stored and the way the collections have been built. Likewise, the Guarani farmers explained the types of seeds they sought, including particularly those which form part of their diet.

At ETB Research Station, where the Guarani were welcomed, is maintained the common bean landrace collection. In this occasion, seeds of 35 common bean landraces varieties were exposed to the farmers for their observation and selection.

Based on their own criteria, the Mbya Guarani performed their selection (Figure 1).

RESULTS AND DISCUSSION

From the dialogue established among them, always in the Guarani language, of 35 LR varieties, have been identified and selected seven, called Rim de Porco, Unha de Princesa, Preto Comprido, Vermelho Anchieta, Amendoim Unaic, Fogo na Serra and Mourinho.

Among these, Mourinho was the only one that the Mbya Guarani stated being identical to the ones have been lost. The six other varieties, despite the fact they were nor identical to the original ones, were selected due to favorable phenotypic characteristics under their criteria.

The experience shared with the Mbya Guarani shows that the common bean germplasm bank of CPACT, that has many LR entries, can contribute not only to the maintenance of the available genetic diversity, but also in the recovery and even in the increase of such diversity.



Figure 1. Selection of common bean landraces by Mbya Guarani farmers

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