

International Crops Research Institute for the Semi-Arid Tropics



Pigeonpea

Taxonomy

Germplasm Collections

Core Collections

Mini Core Collections

Reference Set

Gene Symbols

Random Core Selection

Mini Core

Developing core collection will not solve the problem of low use of germplasm as the size of the core collection would be unwieldy for convenient exploitation by breeders and crop improvement scientists. In pigeonpea, even a core collection consisting of 1290 accessions developed at ICRISAT genebank (10% of total accessions) is large. Hence, a mini core collection of pigeonpea, comprising 146 accessions Click here for List of accessions (about 10% of core collection or 1% of entire collection) was constituted by evaluating the core collection of 1290 accessions for 34 morphoagronomic traits. Results indicated that almost the entire genetic variation and a majority of coadapted gene complexes present in the core subset are preserved in the mini core subset. Due to its greatly reduced size, the mini core subset will provide a more economical starting point for proper exploitation of pigeonpea genetic resources for crop improvement for food, feed, fuel and other agricultural and medicinal purposes (Upadhyaya et al. 2006; Crop Sci. 46:2127-2132). At ICRISAT we have identified new sources resistance to biotic and abiotic stresses and for agronomic traits in the mini core collection.

For more information contact:

Dr H D Upadhyaya

Assistant Research Program Director-Grain Legumes and Principal Scientist and Head Gene Bank **ICRISAT**

H.Upadhyaya@cgiar.org

© by ICRISAT. All rights reserved.