2nd International Conference of Multidisciplinary Approaches (iCMA), 2015
Faculty of Graduate Studies,
University of Sri Jayewardenepura,
Sri Lanka
ISSN: 2386 – 1509



# CHARACTERIZATION OF SOME FINGER MILLET (*ELEUSINE CORACANA* L.) GERMPLASM ACCESSIONS AVAILABLE IN SRI LANKA USING MORPHOLOGICAL MARKERS

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Finger millet (*Eleusine coracana* L.), an annual allotetraploid cereal, is widely cultivated in the arid and semiarid regions of the world. Characterization of conserved germplasms of the crop is of primary importance for the effective use of genetic resources and refines conservation strategies. Currently there are more than 200 finger millet germplasm accessions conserved at Plant Genetic Resource Centre (PGRC) Gannoruwa. Objective of this research was to characterize some of these accessions using morphological markers. Twenty four finger millet accessions were randomly selected from the available germplasm accessions at the PGRC as an initial attempt to understand the genetic structure of the crop. These 24 accessions comprised two recommended varieties of Sri Lanka, two varieties from Zimbabwe, two introduced varieties from India and eighteen accessions collected from different geographical areas of Sri Lanka. These 24 accessions were characterized using 31 morphological markers. Genetic distance among accessions ranged from 0.03 to 0.97 with an average 0.35. Dendrogram constructed based on those distances to assess the genetic relatedness of these accessions, clustered all accessions into two major groups. The first comprised 19 accessions with an average genetic distance 0.3 and the second comprised 5 accessions with an average genetic distance 0.5. The two recommended varieties in Sri Lanka grouped within two major groups separately exhibiting their genetic distances. The two introduced accessions from India also clustered within two major clustered and introduced accessions from Zimbabwe grouped within the same second major cluster. This study highlights the importance of characterization of available germplasm accessions for the improvement of the crop.

**Keywords:** Finger millet, *Eleusine coracana*, Germplasm accessions, morphological markers, genetic distance