Composite Collection

Finger millet (Eleusine coracana (L.) Gaertn), belongs to genus Eleusine in the tribe Eragrostideae family Poaceae (Gramineae), and subfamily Chloridoideae, self pollinating, ranks fourth in importance among millets in the world after sorghum, pearl millet, and foxtail millet. It is a tetraploid species with 2n=36, and self pollinating. It is cultivated in 23 countries on 3.38 m ha producing 3.76 m t mainly in Africa and Asia. Finger millet is an important crop in Uganda, Nepal, Kenya, Ethiopia, Eritrea, and India. Nutritionally it is rich crop for protein, minerals and methionine amino acid. Finger millet was first domesticated in Eastern Africa, possibly in Ethiopia about 5000 BC. It has two subcpecies coracana and Africana. The subspecies consists of four races (cultivated) namely, Elongata, Plana, Compacta and Vulgaris, and subspecies Africana consists of two races (wild) namely africana and spontanea. The entire collection represents 136 advanced cultivars, 50 breeding lines, 5658 landraces, and 105 wild accessions.

Under Generation Challenge Program (GCP) a composite collection of 1000 finger millet germplasm accessions has been constituted. It represents entire collection by origin of accessions, races, and captured maximum diversity available. The composite collection will economize and simplify the process of regeneration and distribution of germplasm to the users. The composite collection consists of ICRISAT core collection 622 accessions, agronomic traits 222, Indian NARS core 50, resistance to stresses 85, grain nutrition traits 12, and genetic diversity 9 accessions. The representation of composite collection by regions: Africa (63.3%), Asia (32.8%), Unknown (2.7%), Europe (0.7%), and Americas (0.5%).