Statistical analysis on genotype by environment interaction in finger millet (*Eleusine coracana* Gaertn)

M.S. NAGARAJA, G.R. HALAGUNDEGOWDA AND H.K. MEENAKSHI

**ABSTRACT** : Finger millet is nutritionally superior to many cereals providing fair amount of proteins, minerals, calcium and vitamins in abundance to people. GXE-interaction has been a major challenge for plant breeders. Ten Finger millet genotypes were evaluated over nine locations for three years 2006, 2007 and 2008. GXE interaction has been analyzed using the pooled two-way analysis of variance for traits like plant height, number of productive tillers, main ear length, number fingers per ear, days to 50 per cent flowering, grain yield and fodder yield. The pooled two-way analysis of variance revealed that the mean sum of squares (MSS) due to genotype and environment interaction was highly significant for all traits over a different years and locations.

**KEY WORDS** : Stability, Genotypes, GXE-interaction, Pooled ANOVA, Yield attributes