

Manuscript Number: 2292 NAAS Rating: 4.47

## Character Association Studies in Ridge Gourd (*Luffa Acutangula* Roxb. L.) With Reference to Yield Attributes

## Shivanand B. Koppad, Mukesh L. Chavan and Jyoti Patil

KRC College of Horticulture, Arabhavi 591 218, India E-mail: shivu.643@gmail.com

Abstract: The nature and magnitude of genetic diversity were estimated in eighteen ridge gourd genotypes on twenty quantitative traits to identify promising traits on which selection can be based. The high phenotypic and genotypic coefficients of variation were found for fresh fruit yield per vine followed by fruit length, fruit diameter and number of fruits per vine, indicating high genetic variability in these traits. High heritability coupled with high genetic advance was observed for chlorophyll content, proline content of leaf, fruit length, fruit yield per vine, fruit diameter and fruit weight indicating the possible role of additive gene action. The traits like fruit weight, fruit diameter, chlorophyll content of leaf and proline content of leaf as it has positive correlation with fruit yield per vine and the days to first female flowering and sex ratio has the negative correlation with the fruit yield per vine.

Key Words: Ridge gourd, Heritability, Genotypic and phenotypic coefficient of variation, Genetic advance