

RESEARCH ARTICLE

Study about genetic variability, heritability and genetic advance in garlic (*Allium sativum*)

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SUMMARY

The study genetic variability, heritability, genetic advance analysis in garlic (*Allium sativum* L.) sixteen genotypes experimental trial was conducted at RRS NHRDF, Salaru, Karnal during 2016-17 and 2017-18. The experiment was conducted in Randomize Block Design with three replications. Observations were recorded for sixteen characteristics. The higher magnitude of genetic variability, heritability, genetic advance observed for plant establishment, plant stand at maturity, % marketable bulb (on wt. basis), gross yield (kg/plot), marketable yield (kg/plot), marketable yield (qt/ha), average weight of bulb (g), weight of 20 bulbs, bulb polar diameter (cm), bulb equatorial diameter (cm), T.S.S (%), average no of cloves per bulb at genotypic levels. High heritability coupled with high genetic advance in percent of mean was recorded for average no of cloves per bulb, marketable yield (kg/plot), marketable yield (qt/ha), gross yield (kg/plot), gross yield (qt/ha), that selection for these traits would be effective for the improvement of bulb yield per plant. The level of variation found in the collection showed the great potentiality of improving agronomic characters in garlic.

Key Words : Genetic variability, Heritability, Genetic advance

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