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RESEARCH ARTICLE

Genetic diversity in linseed (*Linum usitatissimum* L.)

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SUMMARY

A study conducted, at RARS, Raichur during 2006 *Rabi* to know the genetic divergence in 79 linseed genotypes. The experiment was laid out in complete randomized block design with three replications. Observations were recorded on 12 different characters. Following Mahalanobis D^2 statistics genotypes were grouped into 13 clusters using Tocher's method. The higher inter cluster D^2 values were recorded between cluster XI and XIII. Days to maturity, plant height, capsules per plant, days to flowering and harvest index were identified as potential variability which can be used as parameters while selecting diverse parents in the hybridization programme for yield further improvement.

Key Words **:** Genetic, Diversity, Lentil

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Linseed or flax (*Linum usitatissimum* L.) is one of the oldest crops cultivated by man.It is important crop of tropical as well as temperate zone of the world. Based on diversity of plant types, linseed has two centers of origin *i.e.*, South West Asia and the Mediterranean region of Europe (Darlington, 1963).

Linseed oil is unsuitable for nutritional purpose but it is an unparalleled source for paints, varnishes, oil, cloths, lenolinum and lubricants. It has a significant position with about 32 per cent share in total technical oil pool which is having industrial importance. The oil cake is a most valuable feeding cake to both milch and flattering animals. The cake is also used as manure and is a very good source of nitrogen to soil.

Fibres obtained from the stem are known for their length, strength and beauty. They are spun into linen yarns which are used in making the best quality textiles. They are also used for the manufacture of rough textiles such as blankets, carpets, galicha, mattresses, etc. The remaining material after fibre extraction can successfully be utilized as pulp for manufacturing straw boards, writing papers and parchment paper. The stalks are used as fuel.

Crop improvement depends on the magnitude of genetic variability and extent to which the desired characters are heritable. This has inturn attracted the attention of biometrician to study the genetic aspects of economically important characters, such as yield, its components.

MATERIALS AND METHODS

The material for the present study comprised of 79 linseed genotypes. These genotypes were evaluated in the regional agricultural research station, Raichur, UAS, Dharwad, which is situated in North-Eastern Dry Zone (Zone-2) of Karnataka

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