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RESEARCH ARTICLE

Genetic variability, heritability and genetic advance for yield and yield components in castor (*Ricinus communis* L.) genotypes

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SUMMARY

The present investigation was carried out in 43 castor (*Ricinus communis* L.) genotypes. The material for investigation consistded of 36 hybrids, two inbreds, one released variety and four checks (GCH 4, GCH 5, GCH 6 and GCH 7) were grown in a Randomized Block Design in three replications at Regional Research Station, Anand. Variability parameters were estimated for seed yield (g/plant) and yield component characters. Seed yield at 120 days after planting recorded highest phenotypic co-efficient of variability (PCV)value (33.53%). The highest genotypic co-efficient of variability (GCV) value was recorded for seed yield at 120 days after sowing (28.12%). The highest heritability was recorded by seed specific gravity (90.35%) followed by number of nodes up to primary spike (82.23%), plant height up to primary spike (76.32%), number of capsules on primary spike per plant (70.84%) and seed yield at 120 days after sowing (70.32%). The genetic advance as per cent of mean was highest for seed yield at 210 days after sowing (114.63%) followed by seed yield at 180 days after sowing (78.05%), seed yield at 150 days after sowing (50.96%), number of capsules on primary spike (40.14%) and seed yield at 120 days after sowing (34.11%). The character seed yield revealed high variability, heritability and genetic advance as per cent mean.

Key Words : Castor, Genetic advance, Heritability, Variability

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