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## Genetic diversity analysis in coriander (Coriandrum sativum L.) varieties

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wenty four varieties of coriander developed by different centres which located at diverse eco- geographical origins of the country were undertaken in present investigations to determine divergence following varieties for seed yield and its 10 component traits. Varieties were grouped into four clusters. The clustering was made a random without any relationship between genetic diversity and geographic diversity. All varieties were grouped in four cluster that showed narrow genetics base of Indian varieties. Intra-cluster distance was highest in cluster III followed by cluster II, IV and ITocher method of hierarchical cluster analysis was applied to group the varieties. The maximum inter-cluster distance was between clusters III and Iare17.91 and 3.86 respectively. The varieties falling in cluster I are Hisar Sugandh (Hisar, Haryana), Hisar Anand (Hisar, Haryana), RCr-20 (Jobner, Rajasthan), RCr-435 (Jobner, Rajasthan), RCr-436 (Jobner, Rajasthan), RCr-446 (Jobner, Rajasthan), RCr-684 (Jobner, Rajasthan), Swathi (Guntur, Andhra Pradesh), Sadhana (Guntur, Andhra Pradesh), Sindhu (Guntur, Andhra Pradesh), Sudha (Guntur, Andhra Pradesh), Rajendra Swathi ( Doli, Bihar ), GCr-1(Jagudan, Gujarat), GC-2(Jagudan, Gujarat), CO-1(Coimbatore, Tamil Nadu), CO-2(Coimbatore, Tamil Nadu), CO-3(Coimbatore, Tamil Nadu), CO-4(Coimbatore, Tamil Nadu). The variety falling in cluster II is JD-1 (Gwalior, Madhya Pradesh). The varieties falling in cluster III are NRCSS ACr-1 (Ajmer, Rajasthan), RCr-41(Jobner, Rajasthan) and Azad Dhania-1 (Kanpur, Uttar Pradesh). The varieties falling in cluster IV are Hisar Surubhi (Hisar, Haryana) and Pant Haritma (Pantnagar, Uttarkhand). Among the 10 characters studied for genetic divergence, 50 % flowering contributed the maximum accounting for 49.64% of total divergence, followed by test weight 17.03%. The maximum. The maximum divergence of these traits would be used in breeding programme for improvement in coriander.

## **Biography**

Ram Swaroop Meena has completed his PhD at the age of 29 years from Indian Agriculture Research Institute, New Delhi and MSc studies from Swami Keshwan and Rajasthan Agriculture University, Bikaner. He is the Senior Scientist (Plant Breeding) of National Research Centre on Seed Spices. He has published more than 20 research papers in reputed journals and has been serving as a life member of Indian Society of Seed Spices (Life membership), Indian Society of Spices (Life membership), Indian Society of genetics and plant breeding (membership), Indian Society of horticulture (Life membership). He has attended more than 20 national and international conferences, seminars and more than 7 trainings. 4 books edited by him. He got visiting scientist award, 2010, ICARDA, Syria. He also got best scientist award given by Director, National Research Centre on Seed Spices, Ajmer.

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