ESTIMATES OF VARIABILITY PARAMETERS FOR YIELD AND ITS COMPONENTS IN SOYBEAN (GLYCINE MAX L.)

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Received-28.02.2017. Revised-12.03.2017

Abstract: The present study of genetic variability was carried out using 30 genotypes of soybean for 8 quantitative characters. Analysis of variance for the design of experiments indicated highly significances among treatments for all the characters. Wide range of variation was found for seed yield per plant, plant height, 100-seed weight, number of pods per plant, number of secondary branches per plant, number of primary branches per plant, number of seeds per pod, indicated good scope for improvement. Maximum phenotypic and genotypic coefficients of variation were observed for plant height followed by number of primary branches per plant, seed yield per plant, number of clusters per plant, number of pods per plant and pod length.

Keywords: Soybean, Variability, Heritability, Yield

REFERENCES

Aditya, J.P., Bhartiya, P. and Bhartiya, A. (2011). Genetic variability, heritability and character association for yield and component characters in soybean [Glycine max (L.) Merrill.]. Journal of Central European Agriculture 12 (1). 27-34

Ali Ahmad, Aslam, Khan, Sher, Khan, Ehsanullah, Ali Nuashad, Hussain, Fayaz and Ahmad, Izhar (2015). Genetic studies among diverse soybean [Glycine max (L.) Merrill.]. genotypes for variability and correlation at Swat. International Journal of Biosciences. 6 (4): 165-169, Akibode, S. and Maredi, M. (2011). Global and Regional Trends in Production, Trade and Consumption of Food legume Crops. In Report submitted to SPIA, March 27, 2011, 1:18-19.

Antalina, S. (2000). Modern processing and utilization of legumes.Recent Research and Industrial

achievement for soybean food in Japan. Processing of RILET-JIRCAS. Workshop on soybean research .September 28, Malang-Indonesia.

Badkul, A., Shrivastava, A.N., Bisen, R. and Mishra, S. (2014). Study of principal components analyses for yield contributing traits in fixed advanced generations of soybean [*Glycine max* (L.) Merrill]. Soybean Research 2: 44-50.

Balasubramaniyan, P., Palaniappan, S.P. (2003). Principles and practices of agronomy. Pub. By agrbios (India). 45-46. chapter 1. Field crops. An overview.

Borah, H.K. and Khan, A.K.F. (2000). Variability, heritability and genetic advance in fodder cowpea. *Madras Agric. J.*, **87** (1/3): 165-166.

Chandel, K.K., Patel, N.B. and Patel, J.B. (2013). Genetic Variability Analysis in Soybean [*Glycine max* (L.) Merrill]. *AGRES* – An International e-Journal. 2 (3): 318-325.

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