## STUDIES ON YIELD AND QUALITY OF FRENCH BEAN (*PHASEOLUS VULGARIS* L.) GENOTYPES, UNDER NET- HOUSE CONDITIONS

## Jitendra Meena\*, T.S. Dhillon and Anita Meena

\*Department of Horticulture, .H.N.B. Garhwal University, Srinagar- 246174, Uttarakhand. Department of Vegetable Science, Punjab Agricultural University, Ludhiana-141 004, Punjab, India Directorate of Wheat Research, Karnal, Haryana Email: Jitendrameena2485@gmail.com

Received-04.04.2017, Revised-03.12.2017

**Abstract:** French bean is an important legume crop which is grown for its dry grain and tender pods in North-Western India. This off-season crop can be successfully raised in Punjab during winter season which fetches higher price in the market and economical to the farmers when there is no availability of green pods from high altitude. Hence, there is a great scope of cultivation of French bean under net-house conditions in Punjab. The present investigations were carried out in Department of Vegetable Science, PAU Ludhiana with the sole objective to indentify French bean genotypes suitable for cultivation under net-house conditions. Twenty genotypes were selected for green pod yield per plant, number of pods per plant, average pod weight (g). Based on the two year studies, the genotypes Falguni (350.19 g), Cosmo (329.86 g) and IIHR-909 (240.22 g) performed better under net-house conditions for total green pod yield per plant. Maximum number of pods per plant was recorded in genotype Falguni (52.33), Seville (50.83) and IIHR-909 (49.50) while maximum pod weight was elicited by genotypes Falguni (6.96g), Cosmo (6.11g) and DWP-FB-57 (5.78g) respectively.

Keywords: French bean, Green pod yield, Pod weight, Net-house

## REFERENCES

Anonymous (2008). 2000-2001 Horticultural Crop Statistics of Karnataka State at a Glance. Government of Karnataka, Lalbagh, Bangalore, p.24 **Duke, J.A.** (1981). Handbook of legumes of world economic importance. New York, USA/ London, UK : Plenum Press, 195-200.

Das, R.U., Thapa, S., Debnath, Lyngdoh, Y.A. and Malick, D. (2014). Evaluation of French bean ( *(Phaseolus vulgaris* L.) genotypes for seed production. Fisher, R. and Yates, F. (1963). Statistical table for biological,agricultural and medicalresearchers, 6 th ed. Oliver and Boyd Ltd., London. 146p.

Kamaluddin, S. and Shahid, A. (2011). Variability, Correlation and path analysis for seed yield and yield related traits in common beans. *Indian Journal of Horticulture*, 68 (1):56-60 Khyad, R.P. (1996). Effect of levels of fertilizer and row spacing on seed yield and quality of french bean (*Phaseolus vulgaris* L.) varieties. *M.Sc.* (*Agri*) *Thesis*, University of Agricultural Sciences, Bangalore.

**Ramakrishna, K.** (1999). Effect of fertilizer levels and spacing on french bean genotypes. *M.Sc. (Agri.) Thesis*, University of Agricultural Sciences, Bangalore.

**Roy, K.R. and Parthasarathy, V.A.** (1999). Note on phosphorus requirement of French bean *(Phaseolus vulgaris)* varieties Planted at different dates. *Indian J Hortic* **56**(4): 317-320.

Schoonhovern, A., Vosyest, O. (1991). Common Beans: Research for crop improvement.

Singh, D., Kaur, S., Dhillon, T.S. (2004). Protected cultivation of sweet pepper hybrids under Net-house in Indian conditions. *Acta Hort* **659**: 515-18.

## \*Corresponding Author

Journal of Plant Development Sciences Vol. 9 (12): 1101-1106. 2017