Research Note

THE ASIAN JOURNAL OF HORTICULTURE
Vol. **6** | Issue 2 | December, 2011 | 542-543

Article history:
Received : 27.09.2011
Accepted : 10.11.2011

Mean performance of paprika genotypes under Kashmir valley conditions

■N. JABEEN, S. MUFTI[1], K. HUSSAIN[1], TASADUK SHAFI[1] AND SONAM SPALDON[1]

Associated Authors:
[1]Division of Olericulture, Sher-e-Kashmir University of Agricultural Sciences and Technology (K), SHALIMAR (J&K) INDIA

Author for correspondence :
N. JABEEN
Division of Olericulture, Sher-e-Kashmir University of Agricultural Sciences and Technology (K), SHALIMAR (J&K) INDIA
Email : nayeema_jabeen@yahoo.co.in

Abstract : The present study was carried out at the experimental field of Division of Olericulture, SKUAST-K, Shalimar during *Kharif* 2009. The experimental material consisted of 13 genotypes, raised in a plot size of 2.4 x 1.8 m at a spacing of 45 x 30 cm in RBD design with three replications. Observations were recorded from ten randomly selected plants of each genotype in each replication on various characters *viz*; plant height (cm), plant spread (cm), number of branches per plant, number of fruits per plant, fruit length (cm), fruit width (cm), average fruit weight (g), number of seeds per fruit, fruit yield per plant (g) and fruit yield per hectare (q). Significant differences were observed for all the characters under study. Maximum number of seeds per fruit was recorded by P-104 (146.30) followed by SH-P-444 (128.00) and PC-56 (127.30) while minimum by PC-2062 (60.00). The most important trait of economic importance fruit yield per plant and fruit yield per hectare was recorded maximum by SH-P-444 (744.20 g/plant and 344.53 q/ha, respectively) followed by PC-2062 (702.87 g/plant and 325.40 q/ha, respectively) and P-302 (554.67 g/plant and 256.79 q/ha, respectively) while minimum in case of SH-KC-12 (234.33 g/plant and 108.49 q/ha), respectively.

Key words : Mean performance, Paprika, Kashmir

How to cite this article : Jabeen, N., Mufti, S., Hussain, K., Shafi, Tasaduk and Spaldon, Sonam (2011). Mean performance of paprika genotypes under Kashmir valley conditions, *Asian J. Hort.*, **6** (2) : 542-543.

Genetic improvement mainly depends upon the amount of genetic variability present in the population which as a preliminary effort can be obtained by mean performance study. The present investigation was undertaken to study the mean performance of paprika genotypes under Kashmir valley conditions.

The present investigation was carried out at the experimental field of Division of Olericulture, SKUAST-K, Shalimar during *Kharif* 2009. The experimental material consisted of 13 genotypes, raised in a plot size of 2.4 x 1.8 m at a spacing of 45 x 30 cm in RBD design with three replications. All the recommended package of practices were followed for raising the crop. Observations were recorded from ten randomly selected plants of each genotype in each replication on various characters *viz*., plant height (cm), plant spread (cm), number of branches per plant, number of fruits per plant, fruit length (cm), fruit width (cm), average fruit weight (g), number of seeds per fruit, fruit yield per plant (g) and fruit yield per hectare (q).

Significant differences were observed for all the characters under study given in Table 1.

Vegetative characteristics:

Maximum plant height was recorded by the genotype SH-P-1005 (63.00 cm) followed by PC-2062 (61.70 cm) and SH-P-444 (61.30 cm) while minimum by P-301 (39.30 cm), maximum plant spread was recorded by SH-P-1005 (50.30 cm) followed by SH-P-444 (50.00 cm), and PC-2062 (47.70 cm) while minimum by P-203 (35.00 cm); maximum number of branches per plant was observed in SH-P-1005 (12.00), followed by SH-P-444 (11.30) and PC-2062 (10.70) while minimum value was recorded in case of P-301 and P-13 (6.70 each).

Fruit characteristics:

Fruit length was maximum in case of SH-KC-12 (12.70 cm) followed by P-13 (11.70 cm) and P-301 (11.40 cm) while minimum in case of P-104 (7.20 cm). Fruit width was maximum in P-203 (1.50 cm) followed by P-

Table 1: Mean performance of paprika genotypes under Kashmir conditions

Genotypes	Plant height (cm)	Plant spread (cm)	No. of branches/ plant	No. of fruits/ plant	Fruit length (cm)	Fruit width (cm)	Av. fruit weight (g)	No. of seeds/fruit	Fruit Yield/ plant (g)	Fruit Yield (q/ha)
P-7	50.00	42.00	8.00	32.00	10.30	0.80	9.60	95.30	307.33	142.28
P-13	40.30	36.70	6.70	41.70	11.70	1.10	7.80	60.70	326.30	151.07
P-56	44.30	44.00	8.30	48.00	9.10	1.10	8.60	127.30	412.67	191.05
P-82	46.00	39.70	7.00	59.00	10.10	1.00	8.70	83.00	515.17	238.50
P-104	40.30	39.70	7.30	46.30	7.20	1.10	8.20	146.30	379.87	175.86
P-302	47.00	37.00	8.00	59.00	10.10	1.00	9.40	81.70	554.67	256.79
P-301	39.30	37.30	6.70	38.00	11.40	1.40	7.70	88.00	293.90	136.06
P-203	45.00	35.00	8.30	36.00	7.60	1.50	8.70	113.30	314.40	145.55
SH-P-444	61.30	50.00	11.30	60.7	10.80	1.00	12.30	128.00	744.20	344.53
SH-P-1005	63.00	50.30	12.00	36.30	9.20	1.20	11.80	77.70	428.67	198.45
PC-2062	61.70	47.70	10.70	55.30	9.80	0.80	12.70	60.00	702.87	325.40
SH-KC-12	45.30	41.00	7.70	26.30	12.70	1.20	8.90	90.70	234.33	108.49
KTPL-19	47.00	39.00	7.30	60.30	9.00	1.00	7.30	89.70	438.43	202.98
C.D. (P=0.05)	1.54	1.51	1.22	3.15	1.55	0.25	0.25	4.55	35.44	16.40

301 (1.40 cm) and SH-P-1005 and SH-KC-12 (1.20 cm) while minimum in P-2062 and P-7 (0.80 cm each). Maximum average fruit weight was recorded by the genotype PC-2062 (12.70 g) followed by SH-P-444 (12.30 g) and SH-P-1005 (11.80 g) while minimum KTPL-19 (7.30 g each). Maximum number of fruits was observed with SH-P-444 (60.70) followed by KTPL-19 (60.30) and P-82 (59.00) while minimum with SH-KC-12 (26.30).

Seed and fruit yield:

Maximum number of seeds per fruit was recorded by P-104 (146.30) followed by SH-P-444 (128.00) and P-56 (127.30) while minimum by PC-2062 (60.00). The most important trait of economic importance fruit yield per plant and fruit yield per hectare was recorded maximum by SH-P-444 (744.20 g/plant and 344.53 q/ha, respectively) followed by PC-2062 (702.87 g/plant and 325.40 q/ha, respectively) and P-302 (554.67 g/plant and 256.79 q/ha, respectively) while minimum in case of SH-KC-12 (234.33 g/plant and 108.49 q/ha), respectively.

From the present investigation it can be concluded that the best performing lines *viz*., SH-P-444 and PC-2062 also exhibited better performance in vegetative and fruit characteristics implying their significance in better crop production potential under agro climatic conditions of Kashmir valley. Related references which reflect similarity in results can be quoted from other crops like chilli *viz*., Shirsta (1994) and Varalashmi and Haribabu (1991).

REFERENCES

Shirsta, S. (1994). Genetic variability and divergence in chilli (*Capsicum annuum* L.) genotypes. M.Sc. (Ag.) Thesis. University of Dharwad, DHARWAD, KARNATAKA (India).

Varalashmi,B. and Haribabu,K. (1991). Genetic divergence, heritability and genetic advance in chilli (C*apsicum annuum* L.). *Indian J. Genet,* **51**:174-178.

****