Plant Archives Vol. 25, Supplement 1, 2025 pp.1700-1720 e-ISSN:2581-6063 (online), ISSN:0972-5210

Plant Archives

Journal homepage: http://www.plantarchives.org
DOI Url : https://doi.org/10.51470/PLANTARCHIVES.2025.v25.supplement-1.234

STABILITY AND GENETIC VARIABILITY STUDIES OF F_6 GENERATION IN OKRA (*ABELMOSCHUS ESCULENTUS* L. MOENCH.)

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(Date of Receiving : 03-09-2024; Date of Acceptance : 13-11-2024)

ABSTRACT

An investigation entitled, "Stability and Genetic variability studies of F_6 generation in Okra (*Abelmoschus esculentus* L. Moench.)" was undertaken during three crop seasons *viz*., *Summer*-2022(E_1), *Kharif* -2023(E_2) and *Summer*-2024(E_3) at Experimental Farm, Horticulture Research Scheme (Vegetable), Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani. (M.S.). Study was undertaken with the objectives to study magnitude of variability, heritability and genetic advance, correlation studies of yield and yield components at both genotypic and phenotypic levels and analysis of stability parameter over environment. The experimental material comprising 63 genotypes including two check were evaluated in Randomized Block Design (RBD) in two replications. and the data on various growth and yield parameters were recorded and statistically analyzed.

The analysis of variance revealed that significant differences among the genotypes for all the characters except for fruit width across all the three environments indicating the presence of genetic variability in the studied material. All the character studied during course of experiment exhibited high heritability and genetic advance in all the three environments. This indicated that high heritability combined with high genetic advance per cent of mean linked to additive gene action but the response to direct selection would vary with environments. It can be concluded that E_2 (*kharif* 2023) was most suitable for improvement. Therefore, important traits governed by additive gene action which could be improved through selection. Correlation studies among 63 genotypes for yield and yield component at both genotypic and phenotypic level individually and pooled over environment revealed significant and positive association of characters studied with marketable yield per plant, this suggests improvement in yield characters through selection leads to genetic progress. environmental index during *kharif* 2023 (E_2) recorded suitable increase in values which was proved to be best environment. The genotypes PBNOKR-1-7, PBNOKR-1-22, PBNOKR-1-5, PBNOKR-2-4 and PBNOKR-2-8 were found average stable for fruit yield per plant across the environments.

Keywords: Correlation, Genetic advance, Heritability, Okra, Stability analysis, Variability

Introduction

Okra (*Abelmoschus esculentus* L. Moench) is an annual plant in the Malvaceae family that is often cross-pollinated. Okra is believed to have originated in Africa or Asia. It is an annual herb with broad, 10–20 cm leaves that have five to seven lobes on each palmate leaf. Flower with five to seven white or yellow petals and a crimson or purple patch at the base of each petal, with a diameter of 4 to 8 cm. The fruit is a capsule that is filled with many seeds. With 2n = 8x = 72 or 144 chromosomes

Okra pods at their immature edible stage contain high levels of vitamin A and B, as well as minerals such as calcium, phosphorus and iron. It is a great source of iodine; therefore, it could be used to treat goiter (Purewal and Randhawa, 1947). The crop's mucilaginous nature facilitates the consumption of heavy foods while also providing a good amount of

carbohydrates, protein, vitamins, and minerals (Adeniji and Kehinde, 2012). In India, mucilaginous extracts from the green stem are frequently used to clear sugar cane juice. Okra seeds that are dried have 40 % oil content and a 20 % to 30 % crude protein content (Berry *et al.* 1988).

India ranks first in the world. In India okra is commercially grown in Gujarat, Maharashtra, Andhra Pradesh, Madhya Pradesh, and West Bengal. India ranks first in the world with 73 percent of total world production. In India it was cultivated on an area of 526 thousand-hectare with annual production of 6460 thousand tones and productivity of 12.281 ha and in Telangana area 12.16 thousand-hectare, production 167.25 MT and productivity 13.68 / ha (2021-2022 advance NHB). Andhra Pradesh is the leading okra producing state which has production of around 1184.2 thousand tonnes from an area of 78.90 thousand ha, with a productivity of 15 tons/ha. It is followed by West Bengal (862.1 thousand tons okra producing state from 74.00 thousand ha with 11.70 tons/ha productivity). It ranks second in vegetable production in the world after China as per National Horticulture database (Second Advance Estimates) published by National Horticultural Board, during (2021-22). India produced 191.77 million metric tonnes of vegetables. The area under cultivation of vegetables stood at 10.35 million hectares.

Genetic variability is an important factor for any heritable improvement. It is helpful to understand the kind and extent of genetic diversity when choosing desired genotypes from a germplasm. The importance of germplasm collection depends on both the quantity of accessions and their genetic variability. The available germplasm has a wide range of genetic variability, which offers scope for further improvement.

Heritability is that portion of phenotypic variation which is transmitted from parent to progeny. Greater heritable variation means greater probabilities of fixing the character via selection mechanisms. Therefore, Heritability studies are crucial in determining if the variation for a certain trait that has been found is heritable or the result of environmental factors.

Okra displays a wide range of genetic variation. Okra genotypes vary in production potential, climatic adaptability, and resistance to diseases, insects, and pests. The way that different environmental variables affect genotype performance is constantly evolving. Genotype performance varies according to environmental variables. In India, where environmental variables vary within an agroclimatic zone, developing stable cultivars is the only option to stabilize production. Yield trials at various sites helps in the identification of genotypes with high productivity. Several methodologies have been used to test, study, and interpret genotype x environment interaction (Hussein *et al.,* 2000; Sabaghnia *et al.,* 2006). Some models are based on the linear regression of genotypic means on the environmental index (Eberhart and Russell, 1966; Finlay and Wilkinson, 1963). The majority of the quantitative features are strongly impacted by environmental factors and is polygenically controlled. Yield is the most important complex character, based on the multiplicative interactions of several yield attributes.

Keeping this view, the present investigation entitled, "Stability and Genetic variability studies of F_6 generation in Okra (*Abelmoschus esculentus* L. Moench.)" was undertaken with the objectives to estimate the magnitude of variability heritability and genetic advance, to know the association of yield and yield components through correlation studies and to analyses the stability over environments among the genotypes.

Materials and Methods

The present investigation entitled, "Stability and Genetic variability studies of F_6 generation in Okra (*Abelmoschus esculentus* L.Moench.)" was conducted in *summer* 2023, *kharif* 2023 and *summer* 2024 at Experimental Farm, Horticulture Research Scheme (Vegetable), Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani. (M.S.).

Statistical analysis

Variances for all the characters under study will be worked out by using the formula of Panse and Sukhtme (1985). Genotypic and phenotypic variances will be calculated by using the respective mean squares from variance table (Johnson *et al*., 1955). GCV and PCV will be calculated according to method suggested by Burton (1952).

Heritability (broad sense) will be calculated according to method suggested by Allard (1960). Genetic advance will be calculated by formula suggested by Johnson *et al*. (1955).

Correlations of different yield contributing characters will be worked out according to Johnson *et al*. (1955).

The statistical analysis for stability to be done as per method suggested by Eberhart and Russell (1966) for fruit yield and its component traits in okra.

Experimental details:

1	**Name of crop**	Okra (*Abelmoschus esculentus* L. Moench)
2	**Experimental design**	RBD (Randomized block design)
3	**No. of replication**	02
4	**No. of parents**	05
5	**No. of progenies**	112
6	**No. of crosses**	4
7	**Plot size**	3 m x 2.7 m
8	**Spacing**	60 cm x 45 cm
9	**No. of plants per plot**	30

Observations recorded:

(A) Growth observation

1. Plant height (cm)
2. Number of branches per plant
3. Internodal length (cm)
4. Days to 50 % flowering
5. First flowering node
6. First fruiting node

(B) Yield and yield contributing characters

1. Fruit length (cm)
2. Fruit width (cm)
3. Fruit weight (g)
4. Total number of fruits per plant
5. Number of ridges per pod
6. Number of seeds per pod
7. Weight of 10 seeds (g)
8. Weight of 100 seeds (g)
9. Total yield per plant (g)
10. Number of marketable fruits per plant
11. Marketable yield per plant(g)
12. YVMV infestation on plants (%)

Table 1 : Name of genotype and its source:

Sr. No.	Genotypes	Source	Sr. No.	Genotypes	Source
1	PBNOK-2	VNMKV, Parbhani.	32	PBNOKR-2-4	VNMKV, Parbhani.
2	PBNOK-4	VNMKV, Parbhani.	33	PBNOKR-2-5	VNMKV, Parbhani.
3	Parbhani Bhendi	VNMKV, Parbhani.	34	PBNOKR-2-6	VNMKV, Parbhani.
4	Parbhani Kranti	VNMKV, Parbhani.	35	PBNOKR-2-7	VNMKV, Parbhani.
5	Pusa Makhmali	IARI, New delhi.	36	PBNOKR-2-8	VNMKV, Parbhani.
6	VRO-103 (Check)	IIVR, Varanasi	37	PBNOKR-2-9	VNMKV, Parbhani.
7	PBNOKR-1 -1	VNMKV, Parbhani.	38	PBNOKR-2-10	VNMKV, Parbhani.
8	PBNOKR – 1 -2	VNMKV, Parbhani.	39	PBNOKR-2-11	VNMKV, Parbhani.
9	PBNOKR – 1- 3	VNMKV, Parbhani.	40	PBNOKR-3-1	VNMKV, Parbhani.
10	PBNOKR -1-4	VNMKV, Parbhani.	41	PBNOKR-3-2	VNMKV, Parbhani.
11	PBNOKR -1-5	VNMKV, Parbhani.	42	PBNOKR-3-3	VNMKV, Parbhani.
12	PBNOKR-1-6	VNMKV, Parbhani.	43	PBNOKR-3-4	VNMKV, Parbhani
13	PBNOKR-1-7	VNMKV, Parbhani.	44	PBNOKR-3-5	VNMKV, Parbhani
14	PBNOKR-1-8	VNMKV, Parbhani.	45	PBNOKR-3-6	VNMKV, Parbhani
15	PBNOKR-1-9	VNMKV, Parbhani.	46	PBNOKR-3-7	VNMKV, Parbhani
16	PBNOKR-1-10	VNMKV, Parbhani.	47	PBNOKR-3-8	VNMKV, Parbhani
17	PBNOKR-1-11	VNMKV, Parbhani.	48	PBNOKR-3-9	VNMKV, Parbhani
18	PBNOKR-1-12	VNMKV, Parbhani.	49	PBNOKR-3-10	VNMKV, Parbhani
19	PBNOKR-1-13	VNMKV, Parbhani.	50	PBNOKR-3-11	VNMKV, Parbhani
20	PBNOKR-1-14	VNMKV, Parbhani.	51	PBNOKR-3-12	VNMKV, Parbhani
21	PBNOKR-1-15	VNMKV, Parbhani.	52	PBNOKR-3-13	VNMKV, Parbhani
22	PBNOKR-1-16	VNMKV, Parbhani.	53	PBNOKR-4-1	VNMKV, Parbhani
23	PBNOKR-1-17	VNMKV, Parbhani.	54	PBNOKR-4-2	VNMKV, Parbhani
24	PBNOKR-1-18	VNMKV, Parbhani.	55	PBNOKR-4-3	VNMKV, Parbhani
25	PBNOKR-1-19	VNMKV, Parbhani.	56	PBNOKR-4-4	VNMKV, Parbhani
26	PBNOKR-1-20	VNMKV, Parbhani.	57	PBNOKR-4-5	VNMKV, Parbhani
27	PBNOKR-1-21	VNMKV, Parbhani.	58	PBNOKR-4-6	VNMKV, Parbhani
28	PBNOKR-1-22	VNMKV, Parbhani.	59	PBNOKR-4-7	VNMKV, Parbhani
29	PBNOKR-2-1	VNMKV, Parbhani.	60	PBNOKR-4-8	VNMKV, Parbhani
30	PBNOKR-2-2	VNMKV, Parbhani.	61	PBNOKR-4-9	VNMKV, Parbhani
31	PBNOKR-2-3	VNMKV, Parbhani.	62	PBNOKR-4-10	VNMKV, Parbhani
			63	Raadhika (Check)	ADVANTA

Results and Discussion

Genetic variability parameters

Estimates of genotypic ($\sigma^2 g$) and phenotypic ($\sigma^2 p$) variations are provided for each character and environment. Genetic components such as heritability in broad sense (h^2), genotypic coefficient of variance (GCV), phenotypic coefficient of variance (PCV), and genetic advance as a percentage of mean (GA% of mean) were calculated using variance components and mean values from individual environments. Table no. 2 provides a summary of all these estimations.

Before planning a sound breeding strategy, breeder should have genetic information of the concerned plant species. The knowledge of genetic structure that determines the expression of character in relation to adaptability and productivity greatly helps in exploitation of available genetic resources. From the foregoing discussion of the results obtained in the present study, certain suggestions could be made in respect of future okra improvement programme based on the material used.

In general, analysis of variance revealed differential response of genotypes across the environments indicating the influence of environments in the expression of the characters. Mean performance of various characters across the environments exhibited the maximum values for number of primary branches per plant, fruit weight, days to first flowering, first fruiting node, total yield per plot in E_1. Days to 50 % flowering, total number of fruits per plant, number of ridges per pod, number of seeds per pod, weight of 10 seeds, number of marketable fruits per plant, marketable yield per plant, YVMV infestation on plants found maximum values of mean performance in E_2. Plant height, internodal length, fruit length, fruit width and weight of 100 seeds exhibited maximum mean values in E_3. The range of genetic variability was observed wide for total number of fruits per plant, number of ridges per pod, number of seeds per pod, weight of 100 seeds and total yield per plot in E_1. Plant height, days to 50% flowering, days to first flowering, first fruiting node, fruit length, fruit weight, weight of 10 seeds, number of marketable fruits per plant and marketable yield per plant in E_2. Number of primary branches per plant, internodal length, fruit width and YVMV infestation on plants in E_3.

The estimates of phenotypic variance and PCV were higher than their genotypic variance and GCV indicating effect of environment on all the characters under study. Various parameters of variability of different characters showed their preponderance in different environments. Both genotypic and phenotypic variances and GCV and PCV were higher for days to first flowering, fruit length, total number of fruits per plant, number of ridges per pod, number of seeds per pod and weight of 100 seeds in E_1. In E_2 both genotypic and phenotypic variance and GCV and PCV higher for plant height, fruit width, fruit weight, number of marketable fruits per plant and YVMV infestation on plants. Number of primary branches per plant, internodal length, days to 50 % flowering and weight of 10 seeds in E_3.

The estimates of heritability and genetic advance as per cent of mean were higher for plant height, days to 50% flowering, days to first flowering, first fruiting node, fruit length, number of ridges per pod, number of seeds per pod, weight of 10 seeds, total yield per plot, and YVMV infestation in plants in E_1, for fruit weight, marketable yield per plant in E_2 and for number of primary branches per plant, internodal length, fruit width, total number of fruits per plant, weight of 100 seeds and number of marketable fruits per plant in E_3

From above information it could be concluded that environment specific response of genotypes should be considered for breeding variety for specific as well as across environments. Plant height, days to 50 % flowering, fruit width, total number of fruits per plant, number of seeds per pod, total yield per plot, number of marketable fruits per plant and marketable yield per plant exhibited high heritability and genetic advance in all the three environments. This indicated that these traits were governed by additive gene action but the response to direct selection would vary with environments. It can further be concluded that E_3 was least suitable environment with very low estimates for each character as compared to E_1 and E_2. Therefore, important traits governed by additive gene action which could be improved through selection. Khan *et al.* (2005), Saifullah and Rabbani (2009), Chandramouli *et al.* (2016), Singh *et al.* (2017) and Sravanthi *et al.* (2021), reported similar results for variability parameters.

Correlation

The overall study of correlation obtained from 63 genotypes for fruit yield and yield component characters in individual as well as pooled over environments revealed that the marketable yield per plant was strongly associated with all the character except number of branches per plant internodal length, and weight of 10 seeds and 100 seeds both at genotypic and phenotypic levels suggested that the improvement in characters including total number of fruits per plant,

fruit length, fruit width, fruit weight, plant height, number of branches per plant through selection would bring genetic improvement in terms of fruit yield per plant. Similar type of results for character association was reported earlier by Dhall *et al.* (2000), Niranjan and Mishra *et.al* (2003), Mishra *et al.* (2015), Reddy *et al.* (2013) and Alam *et al*. (2020), in okra.

Estimation of stability

In present investigation, genotype PBNOKR-1-7 found average stability for all character except fot days to 50% flowering, fruit length, fruit width, total number of fruits per plant, number of ridges per pod, marketable yield per plant. Genotype PBNOKR-1-22, found highly stable for all character which shows Genotypes with high mean, near to unity regression and least deviation from regression. Genotypes PBNOKR-1-5, PBNOKR-1-11, PBNOKR-2-4, PBNOKR-2-8 found average stability over all environment, for various yield and yield contributing characters. Similar results for the above traits were also reported by for these traits by Jindal *et al*. (2008), Kacchadia *et. al* (2011), Patil *et. al* (2017), Prakash *et al*. (2017), and Sharma *et al*. (2019).

Conclusion

1. On basis of analysis of variance significant variation observed among all three environments among all genotypes studied, various yield and yield contributing characters showed higher estimates of heritability and genetic advance in all the three environments. This indicated that these traits were governed by additive gene action but the response to direct selection would vary with environments. Among three environments E_2 (*Kharif* 2023) proves the best as compared to E_1 (*Summer* 2023) and E_3 (*summer* 2024).
2. Association of yield and yield components at genotypic and phenotypic levels studied through correlation exhibited strong and positive correlation of marketable yield per plant and total yield per plot with all characters both at genotypic and phenotypic levels suggested that the improvement in characters including total number of fruits per plant, fruit length, fruit width, fruit weight, plant height, number of branches per plant through selection would bring genetic improvement in terms of fruit yield per plant.
3. The genotypes PBNOKR-1-7, PBNOKR-1-22, PBNOKR-1-5, PBNOKR-2-4, PBNOKR-2-8 were found average stable for fruit yield per plant across the environments. These genotypes also showed average stability for one or more yield contributing traits across the environments.

Table 2 : Variability parameters of eighteen characters in okra under three environments

Characters		Mean	Range	$\sigma^2 g$	$\sigma^2 p$	GCV	PCV	h^2 (%)	GA (%)	GAM (%)
Plant height (cm)	E_1	99.22	84.25 - 113.95	53.74	66.70	7.38	8.23	80.5	13.55	13.66
	E_2	100.1	85.65 - 115.70	57.94	64.64	7.59	8.02	89.6	14.84	14.82
	E_3	103.62	87.00 - 116.70	61.40	68.82	7.56	7.99	89.4	15.26	14.73
Number of primary branches per plant	E_1	3.00	2.15- 4.60	0.18	0.26	14.30	17.17	69.4	0.73	24.56
	E_2	3.14	2.25 - 4.50	0.12	0.20	11.26	14.31	61.9	0.57	0.73
	E_3	2.96	2.06 - 4.80	0.27	0.32	17.80	19.20	85.9	1.00	33.99
Internodal length (cm)	E_1	4.28	3.25 - 5.40	0.28	0.38	12.36	14.41	73.5	0.93	21.84
	E_2	4.20	3.09 - 5.55	0.23	0.30	11.50	13.10	77	0.87	20.79
	E_3	4.31	2.95 - 4.95	0.29	0.35	12.58	13.82	82.8	1.01	23.60
Days to 50% flowering	E_1	41.04	37.75 - 43.55	2.13	2.53	3.55	3.87	84.1	2.75	6.71
	E_2	41.57	38.35 - 48.15	3.10	3.44	4.24	4.46	90.3	3.45	8.22
	E_3	45.25	39.75 - 44.70	1.52	1.90	2.92	3.26	80.1	2.28	5.38
Days to first flowering	E_1	38.67	35.25 - 41.10	1.82	2.33	3.49	3.95	77.9	2.45	6.34
	E_2	37.98	35.25 - 42.75	3.12	3.64	4.65	5.02	85.8	3.37	8.87
	E_3	38.92	36.00 - 41.25	1.91	2.37	3.55	3.95	80.7	2.56	6.58
First fruiting node	E_1	4.45	3.20 - 5.35	0.14	0.27	8.37	11.72	51.0	0.54	12.32
	E_2	4.23	3.35 - 5.25	0.12	0.18	8.47	10.08	70.7	0.62	14.68
	E_3	4.51	3.80 - 5.20	0.13	0.19	8.00	9.66	68.5	0.61	13.64
Fruit length (cm)	E_1	12.01	6.35 - 14.30	1.24	2.18	9.30	12.29	57.3	1.74	14.51
	E_1	12.05	9.20 - 14.85	2.28	2.38	12.53	12.82	95.5	3.04	25.23
	E_3	12.22	9.25 - 14.85	1.94	2.22	11.41	12.20	87.4	2.68	21.99

Characters		Mean	Range	$\sigma^2 g$	$\sigma^2 p$	GCV	PCV	h2 (%)	GA (%)	GAM (%)
Fruit width (cm)	**E_1**	1.56	1.32 - 2.00	0.02	0.04	10.58	13.10	65.3	0.27	17.62
	E_2	1.54	1.07 - 1.99	0.02	0.03	11.04	11.61	90.4	0.33	21.63
	E_3	1.59	1.23 - 2.10	0.03	0.04	12.36	12.97	90.7	0.38	24.27
Fruit weight (g)	**E_1**	8.97	6.65 – 10.10	0.85	0.98	10.31	11.05	87.1	1.78	19.84
	E_2	9.5	7.65 - 11.10	0.53	0.72	7.64	8.8	74.2	1.30	13.56
	E_3	8.74	7.30 - 10.75	0.53	0.70	8.39	9.56	76.9	1.32	15.15
Total No. of fruits / plant	**E_1**	71.23	51.80 - 87.35	80.54	85.59	12.59	13.01	93.8	17.90	25.12
	E_2	65.50	41.30 -86.75	150.13	178.61	18.70	20.40	84.1	23.14	35.32
	E_3	67.79	42.55 - 86.25	159.74	166.63	18.62	19.03	95.7	25.44	37.53
Number of ridges per pod	**E_1**	5.54	5.00 - 6.55	0.12	0.27	6.25	9.39	44.2	0.47	8.56
	E_2	5.58	5.00 - 6.40	0.20	0.26	8.07	9.16	77.6	0.81	14.6
	E_3	5.68	5.00 - 6.55	0.19	0.31	7.73	9.83	61.8	0.71	12.52
Number of seeds per pod	**E_1**	19.76	13.90 - 27.45	15.20	17.41	19.72	21.11	87.2	7.50	37.95
	E_2	18.52	11.15 -27.50	23.77	25.95	26.32	27.50	91.6	9.61	51.89
	E_3	17.98	12.00 - 28.00	16.84	18.82	22.81	24.12	89.4	7.9	44.46
Weight of 10 seeds (g)	**E_1**	6.12	5.10 - 7.75	0.23	0.38	7.86	10.09	60.8	0.77	12.64
	E_1	5.96	6.10 -7.80	0.32	0.36	9.51	10.14	88.0	1.09	18.39
	E_3	5.98	5.10 - 7.70	0.34	0.39	9.75	10.43	87.3	1.12	18.78
Weight of 100 seeds (g)	**E_1**	7.91	7.00 - 9.10	0.31	0.44	7.09	8.43	70.8	0.97	12.31
	E_2	7.92	7.00 - 9.50	0.35	0.78	7.51	11.14	45.4	0.82	10.42
	E_3	8.05	7.15 - 9.20	0.37	0.42	7.57	8.11	87.4	1.17	14.56
Total yield per plot (g)	**E_1**	5277.89	3919.50 - 8415.50	105571.00	1215059.00	19.18	20.88	84.4	1916.6	36.3
	E_2	5359.57	2792.00-7826.00	1995239.00	2363251.00	26.35	28.68	84.4	2673.6	49.88
	E_3	4727.27	2962.00 - 7606.50	1276290.00	1533877.00	23.89	26.19	83.2	2122.85	44.90
No.s of marketable fruits / plant plantfruits per plant	**E_1**	18.82	10.50 - 27.15	25.66	27.95	26.91	28.08	91.8	9.99	53.12
	E_2	16.45	10.15 - 25.00	20.09	22.23	27.24	28.65	90.4	8.7	53.35
	E_3	16.19	9.95 - 24.30	15.61	16.90	24.39	25.38	92.3	7.82	48.28
Marketable yield per plant (g)	**E_1**	166.35	58.80- 252.50	2216.30	2612.12	28.29	30.72	84.8	89.33	53.69
	E_2	154.42	85.75 - 245.80	1654.42	2465.88	26.33	32.15	67.1	68.6	44.44
	E_3	141.58	83.95 -227.55	1368.14	1562.99	26.12	27.92	87.5	71.28	50.35
YVMV infestation (%)	**E_1**	0.44	0.00 - 3.30	-0.19	2.16	99.22	330.35	-90.2	-0.27	-61.38
	E_2	1.32	0.00 - 4.75	-1.3	5.6	89.20	180.1	-0.24	-1.20	-91.01
	E_3	0.57	0.00 - 3.30	-0.32	3.00	99.10	300.37	-0.10	-0.38	-67.35

Summer-2022 (E_1), *Kharif* -2023 (E_2) and *Summer*-2024 (E_3)

Table 3 : Estimates of genotypic (G) and phenotypic (P) correlations for fruit yield and yield contributing traits in E_1 environment

Sr. No	Chara-cters		PH	NBPP	IL	DTFF	DTFF	FFN	FL	FW	FW	TNFPP	NRPP	NSPP	WTS	WHS	NMFPP	MYPP
1	PH	r_g	**1.000**	0.029	0.137**	-0.224*	-0.169	0.006	0.448**	-0.469**	-0.191*	0.456**	0.563**	-0.642**	0.399**	0.239*	0.523**	0.494**
		r_p	**1.000**	0.037	0.095	-0.168	-0.107	-0.021	0.338**	-0.300**	-0.156	0.387**	0.498**	-0.318**	0.257**	0.198*	0.468**	0.418**
2	NBPP	r_g		**1.000**	0.061	0.000	0.099	-0.046	-0.146	-0.094	-0.01	0.145	0.233*	-0.253**	0.259**	0.073	0.224*	0.217*
		r_p		**1.000**	0.059	0.048	0.105	0.015	-0.038	-0.078	0.049	0.101	0.179*	-0.062	0.176 *	0.003	0.143	0.137
3	IL	r_g			**1.000**	-0.120	-0.161*	0.099	0.161	0.025	-0.138	-0.006	0.126	-0.067	-0.068	-0.155	0.171	0.074
		r_p			**1.000**	-0.074	-0.061	0.050	0.147	0.051	-0.118	0.013	0.097	-0.080	-0.074	-0.140	0.125	0.075
4	DTFF	r_g				**1.000**	0.988 **	0.033**	-0.344**	0.376**	0.160	-0.384**	-0.452**	0.620**	-0.070	0.161	-0.464**	-0.373**
		r_p				**1.000**	0.911**	-0.000	-0.226*	0.289**	0.142	-0.360**	-0.409**	0.327**	-0.032	0.104	-0.434**	-0.343**
5	DTFF	r_g					**1.000**	0.036**	-0.337**	0.294**	0.144	-0.399**	-0.424**	0.556**	-0.087	0.178	-0.388**	-0.302**
		r_p					**1.000**	-0.048	-0.209*	0.249**	0.120	-0.366**	-0.368**	0.294**	-0.010	0.101	-0.340**	-0.252**
6	FFN	r_g						**1.000**	0.258	-0.060	-0.088	-0.165	-0.121	0.357**	-0.362**	0.237*	-0.110	-0.191*
		r_p						**1.000**	0.023	0.083	-0.075	-0.111	-0.061	0.167	-0.087	0.148	-0.037	-0.068
7	FL	r_g							**1.000**	-0.228**	-0.037	0.283**	0.415**	-0.250**	0.204	0.061	0.399**	0.373**
		r_p							**1.000**	-0.116	-0.007	0.189*	0.250**	-0.187*	0.064	-0.024	0.256**	0.254**

8	**FW**	r_g								**1.000**	0.213	-0.487**	-0.385**	0.719**	0.078	0.044	-0.626**	-0.527**
		r_p								**1.000**	0.185*	-0.399**	-0.321**	0.417**	0.014	0.046	-0.466**	-0.361**
9	**FW**	r_g									**1.000**	-0.285**	-0.329**	0.351**	-0.054	0.084	-0.270**	0.154
		r_p									**1.000**	-0.236**	-0.294**	0.160	-0.113	0.094	-0.228**	0.188*
10	**TNFPP**	r_g										**1.000**	0.572**	-0.886**	0.039	0.002	0.583**	0.504**
		r_p										**1.000**	0.545**	-0.604**	-0.015	0.023	0.549**	0.467**
11	**NRPP**	r_g											**1.000**	-0.725**	0.376**	0.144	0.821**	0.693**
		r_p											**1.000**	-0.395**	0.239**	0.170	0.761	0.630**
12	**NSPP**	r_g												**1.000**	0.120	-0.018	-0.856**	-0.688**
		r_p												**1.000**	-0.053	-0.014	-0.514 **	0.415**
13	**WTS**	r_g													**1.000**	0.366**	0.234*	0.266**
		r_p													**1.000**	0.156	0.144	0.120
14	**WHS**	r_g														**1.000**	0.089	0.143
		r_p														**1.000**	0.087	0.120
15	**NMFPP**	r_g															**1.000**	0.909**
		r_p															**1.000**	0.868**
16	**MYPP**	r_g																**1.000**
		r_p																**1.000**

r_g = Genotypic correlation, r_p = Phenotypic correlation.
PH = plant height(cm), NPBPP = number of primary branches per plant , IL= internodal length(cm), DTFF =days to50 % flowering , DTFF = days to first flowering , FFN =first fruiting node , FL = fruit length (cm) , FW=fruit width (cm) , FW =fruit wight(g) , TNFPP =total number of fruits per plant NRPP = number of ridges per pod, NSPP=number of seeds per pod , WTS= weight of 10 seeds(g) , WHS= weight of 100 seeds (g), TYPP= total yield per plot (g) , NMFPP= number of marketable fruits per plant , MYPP= marketable yield per plant (g).

Table 4 : Estimates of genotypic (G) and phenotypic (P) correlations for fruit yield and yield contributing traits in E_2 environment.

Sr. No	Chara-cters		PH	NBPP	IL	DTFF	DTFF	FFN	FL	FW	FW	TNFPP	NRPP	NSPP	WTS	WHS	NMFPP	MYPP
1.	PH	r_g	**1.000**	-0.122	0.446**	-0.330**	-0.338**	-0.160	0.271**	-0.374**	0.185*	0.483**	0.489**	-0.670**	-0.037	-0.217*	0.446**	0.490**
		r_p	**1.000**	-0.102	0.399**	-0.311**	-0.263**	-0.150	0.243**	-0.329**	0.134	0.429**	0444**	-0.542**	-0.008	-0.094	0.394**	0.352**
2	**NBPP**	r_g		**1.000**	0.057	-0.044	-0.028	-0.229**	-0.056	0.030	-0.104	-0.066	0.072	0.002	0.003	0.068	0.082	0.035
		r_p		**1.000**	0.036	0.005	-0.013	-0.126	-0.044	0.045	-0.088	-0.082	0.068	-0.017	-0.044	0.061	0.072	0.044
3	**IL**	r_g			**1.000**	-0.163	-0.151	-0.196*	0.067	-0.391**	0.163	0.466**	0.325**	-0.378**	0.112	-0.185*	0.293**	0.356**
		r_p			**1.000**	-0.118	-0.082	-0.108	0.052	-0.359**	0.120	0.416**	0.254**	-0.375**	0.126	-0.168	0.233**	0.240**
4	**DTFF**	r_g				**1.000**	0.900**	0.247**	-0.117	0.405**	-0.144	-0.489**	-0.576**	0.632**	0.086	0.425**	-0.527**	-0.447**
		r_p				**1.000**	0.798**	0.213*	-0.99	0.350**	-0.135	-0.425**	-0.520**	0.483**	0.096	0.236**	-0.479**	-0.361**
5	**DTFF**	r_g					**1.000**	0.128	-0.012	0.415**	-0.285**	-0.493**	-0.514**	0.630**	0.123	0.433**	-0.446**	-0.421*8
		r_p					**1.000**	0.108	-0.014	0.362**	-0.217*	-0.393**	-0.477**	0.521**	0.104	0.252**	-0.416**	-0.348**
6	**FFN**	r_g						**1.000**	-0.066	0.315**	-0.363**	-0.274**	-0.386**	0.356**	0.236**	0.291**	-0.437**	-0.560**
		r_p						**1.000**	-0.050	0.231**	-0.224*	-0.188*	-0.303**	0.264**	0.197*	0.184*	-0.329**	-0.369**
7	**FL**	r_g							**1.000**	-0.136	0.192*	0.175*	0.180*	-0.137	-0.083	-0.110	0.136	0.249**
		r_p							**1.000**	-0.136	0.163	0.150	0.158	-0.131	-0.074	-0.048	0.116	0.175*
8	**FW**	r_g								**1.000**	-0.015	-0.514**	-0.501**	0.587**	-0.082	0.350**	-0.501**	-0.529**
		r_p								**1.000**	0.002	-0.456**	-0.447**	0.486**	-0.073	0.221*	-0.443**	-0.404**
09	**FW**	r_g									**1.000**	-0.084	0.066	-0.118	-0.280**	-0.200*	0.040	0.351**
		r_p									**1.000**	-0.053	0.053	-0.065	-0.260*	-0.107	0.024	0.268**
10	**TNFPP**	r_g										**1.000**	0.689**	-0.812**	0.148	-0.358**	0.673**	0.649**
		r_p										**1.000**	0.068**	-0.677**	0.153	-0.217*	0.591**	0.595**
11	**NRPP**	r_g											**1.000**	-0.869**	0.007	-0.227*	0.957**	0.930**
		r_p											**1.000**	-0.723**	-0.005	-0.105	0.950**	0.811**
12	**NSPP**	r_g												**1.000**	-0.038	0.389**	-0.848**	-0.850**
		r_p												**1.000**	-0.059	0.278**	-0.695**	-0.577**
13	**WTS**	r_g													**1.000**	0.484**	0.085	0.018
		r_p													**1.000**	0.254**	0.069	-0.010
14	**WHS**	r_g														**1.000**	-0.190*	-0.198*
		r_p														**1.000**	-0.088	-0.070
15	**NMFPP**	r_g															**1.000**	0.952**
		r_p															**1.000**	0.853**
16	**MYPP**	r_g																**1.000**
		r_p																**1.000**

r_g = Genotypic correlation, r_p = Phenotypic correlation.
PH = plant height(cm), NPBPP = number of primary branches per plant , IL= internodal length(cm), DTFF =days to50 % flowering , DTFF = days to first flowering , FFN =first fruiting node , FL = fruit length (cm) , FW=fruit width (cm) , FW =fruit wight(g) , TNFPP =total number of fruits per plant NRPP = number of ridges per pod, NSPP=number of

seeds per pod , WTS= weight of 10 seeds(g) , WHS= weight of 100 seeds (g), TYPP= total yield per plot (g) , NMFPP= number of marketable fruits per plant , MYPP= marketable yield per plant (g).

Table 5 : Estimates of genotypic (G) and phenotypic (P) correlations for fruit yield and yield contributing traits in E_3 environment.

S No	Chara -cters		PH	NBPP	IL	DTFF	DTFF	FFN	FL	FW	FW	TNFPP	NRPP	NSPP	WTS	WHS	NMFPP	MYPP
1	**PH**	r_g	**1.000**	-0.1888	-0.150	-0.292**	-0.285**	-0.142	0.524**	-0.534**	0.019	0.387**	0.611**	-0.505**	-0.052	0.039	0.588**	0.550**
		r_p	**1.000**	-0.154	-0.123	-0.018	-0.252**	-0.080	0.469**	-0.483**	0.026	0.369**	0.541**	-0.356**	-0.040	0.037	0.531**	0.487**
2	**NBPP**	r_g		**1.000**	0.350**	0.058	0.096	0.027	-0.176	0.228	-0.004	0.107	0.000	-0.071	0.202	0.108	-0.013	-0.010
		r_p		**1.000**	0.283**	-0.081	0.072	0.013	-0.160	0.234**	0.007	0.113	0.015	-0.067	0.144	0.118	-0.002	0.001
3	**IL**	r_g			**1.000**	0.286*	0.268*	0.250*	-0.223	0.142	0.136	-0.227*	-0.289**	0.208**	-0.037	0.074	-0.271**	-0.202*
		r_p			**1.000**	-0.216*	0.220*	0.194*	-0.159	0.125	0.079	-0.197*	-0.268**	0.114	-0.051	0.053	-0.239**	-0.186*
4	**DTFF**	r_g				**1.000**	1.051	0.167**	-0.139*	0.218**	0.035	-0.287**	-0.454**	0.420**	0.300**	0.385**	-0.513**	-0.455**
		r_p				**1.000**	0.857**	0.130	-0.098	0.209*	0.025	-0.260**	-0.383**	0.301**	0.247**	0.302**	-0.425**	-0.364**
5	**DTFF**	r_g					**1.000**	0.177	-0.046	0.178	0.019	-0.240*	-0.437**	0.392**	0.322**	0.465**	-0.486**	-0.429**
		r_p					**1.000**	0.175*	-0.057	0.176*	0.038	-0.214*	-0.370**	0.242**	0.309**	0.393**	-0.430**	-0.368**
6	**FFN**	r_g						**1.000**	-0.204	0.156	-0.101	-0.360**	-0.392**	0.419**	-0.009	0.140	-0.410**	-0.408**
		r_p						**1.000**	-0.219*	0.132	-0.085	-0.281**	-0.319**	0.274**	-0.005	0.157	-0.317**	-0.312**
7	**FL**	r_g							**1.000**	-0.474**	0.064	0.479**	0.356**	-0.367**	0.091	0.076	0.340**	0.337**
		r_p							**1.000**	-0.416**	0.044	0.442**	0.289**	-0.255**	0.083	0.047	0.272**	0.261**
8	**FW**	r_g								**1.000**	-0.117	-0.508**	-0.448**	0.582**	0.185	0.230*	-0.462**	-0.449**
		r_p								**1.000**	-0.096	-0.465**	-0.412**	0.388**	0.168	0.191*	-0.430**	-0.410**
9	**FW**	r_g									**1.000**	0.190	-0.006	-0.104	0.166	0.149	0.046	0.373**
		r_p									**1.000**	0.173	0.044	-0.073	0.126	0.114	0.083	0.427**
10	**TNFPP**	r_g										**1.000**	0.531**	-0.621**	0.249*	-0.095	0.519**	0.546**
		r_p										**1.000**	0.494**	-0.491**	0.219*	-0.082	0.485**	0.503**
11	**NRPP**	r_g											**1.000**	-0.603**	0.106	-0.090	0.993**	0.920**
		r_p											**1.000**	-0.469**	0.074	-0.070	0.964**	0.887**
12	**NSPP**	r_g												**1.000**	0.010	0.100	-0.577**	-0.558**
		r_p												**1.000**	0.058	0.165	-0.451**	-0.429**
13	**WTS**	r_g													**1.000**	O.473**	0.062	0.118
		r_p													**1.000**	0.425**	0.044	0.087
14	**WHS**	r_g														**1.000**	-0.094	-0.036
		r_p														**1.000**	-0.077	-0.025
15	**NMFPP**	r_g															**1.000**	0.942**
		r_p															**1.000**	0.932**
16	**MYPP**	r_g																**1.000**
		r_p																**1.000**

r_g = Genotypic correlation, r_p = Phenotypic correlation.
PH = plant height(cm), NPBPP = number of primary branches per plant , IL= internodal length(cm), DTFF =days to50 % flowering , DTFF = days to first flowering , FFN =first fruiting node , FL = fruit length (cm) , FW=fruit width (cm) , FW =fruit wight(g) , TNFPP =total number of fruits per plant NRPP = number of ridges per pod, NSPP=number of seeds per pod , WTS= weight of 10 seeds(g) , WHS= weight of 100 seeds (g), TYPP= total yield per plot (g) , NMFPP= number of marketable fruits per plant , MYPP= marketable yield per plant (g).

Table -6: Estimates of genotypic (G) and phenotypic (P) correlations for fruit yield and yield contributing traits pooled over environment

Sr. No	Chara-cters		PH	NBPP	IL	DTFF	DTFF	FFN	FL	FW	FW	TNFPP	NRPP	NSPP	WTS	WHS	NMFPP	MYPP
1.	**PH**	r_g	**1.000**	-0.122*	0.226**	-0.320**	-0.447**	-0.146**	0.724**	-0.688**	-0.041	0.539**	0.628**	-0.650**	0.004	-0.084	0.564**	0.594**
		r_p	**1.000**	-0.088	0.123*	-0.142**	-0.159**	-0.040	0.353**	-0.349**	-0.049	0.363**	0.444**	-0.370**	0.042	0.044	0.397**	0.352**
2	**NBPP**	r_g		**1.000**	0.319**	-0.035	-0.067	-0.047	-0.364**	0.070	0.222**	0.029	0.088	-0.115*	0.339**	0.089	0.079	0.144**
		r_p		**1.000**	0.121*	0.015	0.016	-0.060	-0.090	0.060	0.015	0.023	0.078	-0.057	0.098	0.052	0.061	0.066
3	**IL**	r_g			**1.000**	-0.016	0.005	0.186**	-0.011	-0.018	-0.000	0.187**	0.221**	-0.111*	0.224**	0.051	0.206**	0.212**
		r_p			**1.000**	0.015	0.044	0.072	0.017	-0.026	-0.021	0.086	0.027	-0.092	0.000	-0.088	0.046	0.040
4	**DTFF**	r_g				**1.000**	0.819**	0.468**	-0.100*	0.508**	-0.029	-0.559**	-0.771**	0.839**	0.112*	0.601**	-0.753**	-0.760**
		r_p				**1.000**	0.811**	0.121*	-0.107*	0.293**	-0.033	-0.350**	-0.473**	0.392**	0.076	0.228**	-0.484**	-0.406**
5	**DTFF**	r_g					**1.000**	0.534**	-0.024	0.524**	-0.222**	-0.486**	-0.634**	0.819**	0.288**	0.691**	-0.547**	-0.598**
		r_p					**1.000**	0.120*	-0.066	0.286**	-0.104*	-0.272**	-0.394**	0.361**	0.147**	0.257**	-0.354**	-0.315**
6	**FFN**	r_g						**1.000**	-0.015	0.448**	-0.431**	-0.287**	-0.381**	0.555**	0.125*	0.472**	-0.317**	-0.487**
		r_p						**1.000**	-0.058	0.163**	-0.199**	-0.144**	-0.201**	0.236**	0.038	0.174**	-0.167**	-0.222**
7	**FL**	r_g							**1.000**	-0.630**	-0.162**	0.494**	0.348**	-0.363**	0.171**	-0.0000	0.350**	0.345**
		r_p							**1.000**	-0.220**	0.044	0.253**	0.212**	-0.187**	0.015	-0.013	0.190**	0.205**
8	**FW**	r_g								**1.000**	-0.213**	-0.670**	-0.694**	0.736**	-0.019	0.424**	-0.745**	-0.847**
		r_p								**1.000**	0.004	-0.412**	-0.391**	0.430**	0.036	0.154**	-0.436**	-0.390**

09	**FW**	r_g									**1.000**	-0.131*	-0.182**	-0.016	-0.250**	-0.270**	-0.282**	-0.044
		r_p									**1.000**	-0.072	-0.077	-0.003	-0.085	-0.002	-0.092	0.258**
10	**TNFPP**	r_g										**1.000**	0.744**	-0.859**	0.339**	-0.382**	0.702**	0.718**
		r_p										**1.000**	0.556**	-0.574**	0.150**	-0.121*	0.542**	0.480**
11	**NRPP**	r_g											**1.000**	-0.918**	0.153**	-0.377**	0.954**	0.931**
		r_p											**1.000**	-0.543**	0.112*	-0.034	0.877**	0.766**
12	**NSPP**	r_g												**1.000**	-0.111*	0.511**	-0.860**	-0.919**
		r_p												**1.000**	-0.026	0.158**	-0.551**	-0.481**
13	**WTS**	r_g													**1.000**	0.592**	0.182**	0.170**
		r_p													**1.000**	0.259**	0.114*	0.085
14	**WHS**	r_g														**1.000**	-0.334**	-0.423**
		r_p														**1.000**	-0.042	-0.016
15	**NMFPP**	r_g															**1.000**	0.974**
		r_p															**1.000**	0.875**
16	**MYPP**	r_g																**1.000**
		r_p																**1.000**

r_g = Genotypic correlation, r_p = Phenotypic correlation.

PH = plant height(cm), NPBPP = number of primary branches per plant , IL= internodal length(cm), DTFF =days to50 % flowering , DTFF = days to first flowering , FFN =first fruiting node , FL = fruit length (cm) , FW=fruit width (cm) , FW =fruit wight(g) , TNFPP =total number of fruits per plant NRPP = number of ridges per pod, NSPP=number of seeds per pod , WTS= weight of 10 seeds(g) , WHS= weight of 100 seeds (g), TYPP= total yield per plot (g) , NMFPP= number of marketable fruits per plant , MYPP= marketable yield per plant (g).

Table 7 : Estimates of stability parameters for different growth characters in okra

Sr.No.	Genotypes	Plant height (cm)			Number of primary branches /plant		
		μ	bi	S^2di	μ	bi	S^2di
1	PBNOK-2	94.80	-0.26	4.1	2.85	1.17	0.67 ***
2	PBNOK-4	87.60	0.87	-4.1	4.02	1.78	1.96 ***
3	Parbhani Bhendi	94.70	-0.16	-3.9	3.82	-2.54	0.20 *
4	Parbhani Kranti	107.50	0.21	-3.8	3.78	-2.03	0.07
5	Pusa Makhmali	108.70	-2.528*	-5	3.45	-3.34	0.21 **
6	VRO-103 (Check)	106.40	0.82	-3.6	4.15	-9.97	0.01
7	PBNOKR-1 -1	107.60	-2.06	24.7	2.86	8.81	0.00
8	PBNOKR – 1 -2	107.80	1.80	-3.5*	2.61	2.84	0.25**
9	PBNOKR – 1- 3	107.00	1.64	0.2	2.90	2.79	0.49 ***
10	PBNOKR -1-4	105.20	4.25	-3.9	2.82	-0.16	0.18 *
11	PBNOKR -1-5	99.70	0.90	11.3	3.05	1.1	0.00
12	PBNOKR-1-6	105.20	0.64	-4.8	2.45	1.12	-0.01
13	PBNOKR-1-7	113.50	0.95	-4.9	3.10	1.12	0.12 *
14	PBNOKR-1-8	106.70	2.486*	-4.8	2.88	3.56	0.24 **
15	PBNOKR-1-9	98.50	3.05	-1.6	3.02	4.22	-0.03
16	PBNOKR-1-10	92.80	5.26	-3.1	3.07	-1.31	0.10
17	PBNOKR-1-11	106.80	0.89	-0.2	2.92	1.01	0.10
18	PBNOKR-1-12	106.80	0.75	5.8	3.12	-1.31	0.10
19	PBNOKR-1-13	114.10	0.85	2	2.82	0.83	0.00
20	PBNOKR-1-14	109.30	2.812*	-4.9	2.55	2.51	-0.01
21	PBNOKR-1-15	105.50	3.25	-1.3	2.93	0.48	-0.01
22	PBNOKR-1-16	106.90	1.64	-4.1	3.20	-0.13	0.07
23	PBNOKR-1-17	107.20	3.90	-1.3	3.05	2.11	0.10
24	PBNOKR-1-18	106.30	-0.68	-4.4	2.88	0.64	0.20 *
25	PBNOKR-1-19	111.10	0.91	-5	3.52	0.91	-0.04
26	PBNOKR-1-20	107.00	0.36	-3.8	2.98	2.30	0.33 **
27	PBNOKR-1-21	106.30	2.82	-4.3	2.97	0.08	0.10
28	PBNOKR-1-22	114.90	0.87	-4	3.38	0.89	0.00
29	PBNOKR-2-1	99.90	0.453*	-4.9	3.12	-1.98	-0.04
30	PBNOKR-2-2	96.80	4.818*	-4.7	3.05	-0.54	0.04
31	PBNOKR-2-3	104.90	0.03	5	3.18	-0.03	-0.01
32	PBNOKR-2-4	106.80	0.84	-4.9	3.05	-1.36	0.04
33	PBNOKR-2-5	101.80	0.61	-3.2	3.03	-0.40	0.00

Sr.No.	Genotypes	Plant height (cm)			Number of primary branches /plant		
		μ	bi	S²di	μ	bi	S²di
34	PBNOKR-2-6	104.20	-2.89	-2.4	3.37	1.25	0.19 *
35	PBNOKR-2-7	96.40	3.72	-0.3	3.08	2.56	0.17 *
36	PBNOKR-2-8	95.40	0.83	-4	3.25	0.98	0.35 **
37	PBNOKR-2-9	102.60	-1.64	11.7	2.92	3.10	0.01
38	PBNOKR-2-10	101.10	1.70	-4.4	3.09	2.29	0.70 ***
39	PBNOKR-2-11	105.70	0.16	-2.4	3.18	5.10	0.08
40	PBNOKR-3-1	94.70	0.85	-4.8	3.41	7.55	-0.03
41	PBNOKR-3-2	93.70	-1.40	49.1	2.98	5.53	-0.03
42	PBNOKR-3-3	93.50	0.51	20**	3.28	6.92	-0.03
43	PBNOKR-3-4	95.40	1.18	-2.9*	2.75	0.86	0.17 *
44	PBNOKR-3-5	98.80	2.01	96.6	3.13	0.96	-0.03
45	PBNOKR-3-6	97.20	3.61	31.5***	2.95	1.07	0.39 ***
46	PBNOKR-3-7	94.20	1.22	-4.2**	3.62	1.68	-0.04
47	PBNOKR-3-8	94.80	0.082*	-4.9	2.80	2.06	0.07
48	PBNOKR-3-9	96.60	2.03	164.7	2.95	0.80	0.13 *
49	PBNOKR-3-10	100.60	4.11	47.5***	2.72	-0.24	0.04
50	PBNOKR-3-11	97.20	-0.12	0.9**	3.30	-2.30	0.01
51	PBNOKR-3-12	97.80	2.98	-2.7	3.02	-4.73	0.06
52	PBNOKR-3-13	93.80	1.60	14.1	2.98	0.48	-0.01
53	PBNOKR-4-1	90.50	0.80	5.4	2.85	-5.02	0.07
54	PBNOKR-4-2	89.10	-0.24	6.5	3.15	-2.43	0.04
55	PBNOKR-4-3	92.80	-0.15	19.8	2.87	2.24	0.45 ***
56	PBNOKR-4-4	97.20	0.31	-0.6*	2.95	3.53	-0.02
57	PBNOKR-4-5	92.10	0.305*	-4.9	2.55	1.79	0.00
58	PBNOKR-4-6	90.20	-1.56	24.6	3.07	3.80	0.63 ***
59	PBNOKR-4-7	93.50	-0.39	105.3*	2.83	3.07	0.15 *
60	PBNOKR-4-8	99.50	0.86	29.4***	2.88	1.07	0.11 *
61	PBNOKR-4-9	100.60	3.23	10.1**	2.57	-1.26	0.07
62	PBNOKR-4-10	97.60	1.81	18.5	2.97	-1.12	0.03
63	Raadhika (Check)	110.70	0.84	3.6*	2.73	1.04	0.22**
	Mean	**101.0**	**1.0**		**3.03**	**1.00**	

* Significant at 5% level ** Significant at 1% level

Table 8 : Estimates of stability parameters for different growth characters in okra

Sr.No.	Genotypes	Internodal length(cm)			Days to 50% flowering		
		μ	bi	S²di	μ	bi	S²di
1	PBNOK-2	3.90	2.37	-0.04	38.86	1.53	-0.04
2	PBNOK-4	3.83	1.12	-0.04	39.90	0.24	-0.11
3	Parbhani Bhendi	4.12	-0.62	0.15 *	42.48	-0.04	0.30
4	Parbhani Kranti	4.30	-1.38	-0.04	41.28	0.25	-0.20
5	Pusa Makhmali	5.38	-2.5*	-0.04	44.03	1.05	-0.21
6	VRO-103 (Check)	5.30	2.42	0.27 **	41.70	0.95	0.43
7	PBNOKR-1 -1	4.32	-15.89	0.19 *	40.10	2.02	1.60
8	PBNOKR – 1 -2	4.25	-14.12	0.82***	41.76	-0.84	-0.01
9	PBNOKR – 1- 3	4.32	-5.97	-0.03	40.80	1.38	-0.22
10	PBNOKR -1-4	4.32	-2.62*	-0.04	41.85	-0.49	0.07
11	PBNOKR -1-5	4.01	0.9	0.29 **	40.23	0.88	0.88
12	PBNOKR-1-6	4.28	1.39	0.42 **	41.43	3.33	0.44
13	PBNOKR-1-7	3.93	0.86	-0.03	42.61	0.82	2.12
14	PBNOKR-1-8	4.37	-3.98	0.05	42.30	1.66	0.19
15	PBNOKR-1-9	4.03	-0.29	0.186 *	40.21	1.66	0.76
16	PBNOKR-1-10	4.48	-0.04	1.31 ***	41.00	1.45	2.72
17	PBNOKR-1-11	4.03	0.89	0.05	40.10	0.90	1.75
18	PBNOKR-1-12	4.50	-1.92	0.30 **	41.78	0.92	0.55

Sr.No.	Genotypes	Internodal length(cm)			Days to 50% flowering		
		μ	bi	S²di	μ	bi	S²di
19	PBNOKR-1-13	3.40	0.96	-0.04	40.50	0.89	0.31
20	PBNOKR-1-14	4.12	-1.07	-0.01	41.51	0.66	0.00
21	PBNOKR-1-15	4.55	3.89	0.40 **	40.48	3.58	-0.11
22	PBNOKR-1-16	4.17	-1.09	0.15 *	39.95	1.78	0.36
23	PBNOKR-1-17	3.95	-9.13	0.31 **	40.46	2.45	3.36
24	PBNOKR-1-18	3.95	-13.58	0.09	40.46	0.64	2.03
25	PBNOKR-1-19	3.68	0.83	0.58 ***	40.93	0.98	1.80
26	PBNOKR-1-20	3.82	-4.82	0.01	39.71	2.59	-0.01
27	PBNOKR-1-21	3.95	1.74	0.12	41.71	0.63	-0.22
28	PBNOKR-1-22	3.67	0.94	0.41 **	40.60	0.86	1.18
29	PBNOKR-2-1	4.55	5.97	0.23 *	40.96	1.17	4.06
30	PBNOKR-2-2	4.80	5.90	0.01	39.45	0.81	-0.20
31	PBNOKR-2-3	4.22	-1.58	0.05	40.50	2.90	5.46
32	PBNOKR-2-4	4.02	1.02	0.43**	41.61	1.1	1.02
33	PBNOKR-2-5	5.13	-0.92	-0.04	41.95	0.91	-0.05
34	PBNOKR-2-6	4.68	4.78	0.04	40.75	-0.53	0.10
35	PBNOKR-2-7	4.13	0.08	-0.03	40.23	0.54	1.16
36	PBNOKR-2-8	4.12	0.93	-0.04	40.03	0.92	-0.20
37	PBNOKR-2-9	4.40	2.58	-0.03	40.80	2.85	1.32
38	PBNOKR-2-10	4.10	-2.31	2.26 ***	41.60	-0.42	2.26
39	PBNOKR-2-11	4.23	4.71	1.06 ***	40.36	0.13	1.17
40	PBNOKR-3-1	3.90	-3.68	0.50 ***	42.95	1.78	-0.14
41	PBNOKR-3-2	4.55	-1.56	0.00	41.55	0.31	-0.22
42	PBNOKR-3-3	3.92	0.97	0.19 *	**42.48**	**-0.02**	0.07
43	PBNOKR-3-4	4.08	1.97	-0.03	39.25	0.84	-0.19
44	PBNOKR-3-5	3.48	5.84	0.01	42.10	-0.34	2.24
45	PBNOKR-3-6	4.00	11.17	0.03	42.65	-0.47	0.96
46	PBNOKR-3-7	4.42	12.35	-0.03	42.48	1.10	-0.09
47	PBNOKR-3-8	4.63	10.22	0.24 *	42.68	0.83	2.87
48	PBNOKR-3-9	4.41	12.43	0.00	42.30	-1.20	0.10
49	PBNOKR-3-10	4.72	9.55	0.28 **	42.11	-0.18	-0.20
50	PBNOKR-3-11	4.10	0.07	0.54 ***	42.63	1.27	-0.22
51	PBNOKR-3-12	4.32	4.31	0.10	41.96	2.98	-0.16
52	PBNOKR-3-13	4.30	3.55	-0.04	41.98	2.22	0.06
53	PBNOKR-4-1	3.77	8.63	0.12	43.36	0.83	-0.19
54	PBNOKR-4-2	3.73	7.69	0.13	42.96	0.37	-0.18
55	PBNOKR-4-3	4.02	-2.86	0.05	42.28	1.13	-0.04
56	PBNOKR-4-4	4.27	-1.05	-0.04	44.61	2.33	20.56
57	PBNOKR-4-5	4.02	11.27	0.94 ***	44.28	-0.61	5.09
58	PBNOKR-4-6	3.95	1.61	0.04	43.38	2.37	-0.17
59	PBNOKR-4-7	4.33	2.04	-0.04	43.55	2.41	-0.17
60	PBNOKR-4-8	4.05	1.2	0.01	40.2	0.85	2.07
61	PBNOKR-4-9	4.62	1.05	0.46 ***	43.15	0.28	0.38
62	PBNOKR-4-10	4.45	1.54	0.17 *	42.90	2.13	0.76
63	Raadhika (Check)	4.13	7.01	0.17 *	41.18	-1.27	1.07
	Mean	**4.27**			**41.64**		

* Significant at 5% level ** Significant at 1% level

Table 9 : Estimates of stability parameters for different growth characters in okra

Sr.No.	Genotypes	Days to first flowering			First fruiting node		
		μ	bi	S²di	μ	bi	S²di
1	PBNOK-2	35.73	-0.17	0.04	4.77	0.19	-0.04
2	PBNOK-4	37.17	-1.18	-0.26	3.53	0.00	0.14 *
3	Parbhani Bhendi	39.93	0.11	-0.28	4.23	0.06	-0.01

Sr.No.	Genotypes	Days to first flowering			First fruiting node		
		μ	bi	S²di	μ	bi	S²di
4	Parbhani Kranti	37.85	0.96	0.41	4.50	0.70	-0.03
5	Pusa Makhmali	41.35	-0.44	2.57 **	4.68	1.05	0.20 *
6	VRO-103 (Check)	38.48	3.57	1.14 *	4.02	-0.38	-0.01
7	PBNOKR-1 -1	36.40	0.04	0.04	4.13	3.56	-0.03
8	PBNOKR – 1 -2	38.68	-0.76	2.31 **	3.92	1.21	0.01
9	PBNOKR – 1- 3	37.50	2.06	-0.28	4.37	1.85	0.04
10	PBNOKR -1-4	39.00	1.55	0.24	4.25	0.77	0.64***
11	PBNOKR -1-5	37.42	0.84	0.05	4.37	1.08	-0.04
12	PBNOKR-1-6	38.78	0.38	4.55 ***	3.88	0.96	0.20 *
13	PBNOKR-1-7	37.86	0.95	-0.29	3.78	0.84	-0.01
14	PBNOKR-1-8	39.70	-0.26	0.64	4.28	3.31	0.19 *
15	PBNOKR-1-9	37.30	-0.52	0.34	4.35	2.35	-0.04
16	PBNOKR-1-10	37.98	2.77	0.06	4.63	2.93	0.59 ***
17	PBNOKR-1-11	37.40	0.88	0.80	4.32	0.93	0.04
18	PBNOKR-1-12	38.35	3.21	1.12 *	4.57	2.23	0.10
19	PBNOKR-1-13	37.20	1.1	2.58 **	4.32	1.02	-0.04
20	PBNOKR-1-14	38.68	0.32*	-0.29	4.55	1.65	-0.03
21	PBNOKR-1-15	37.55	2.18	5.88 ***	4.28	-0.50	0.15 *
22	PBNOKR-1-16	36.75	2.71	-0.28	4.50	-0.45	-0.02
23	PBNOKR-1-17	37.78	3.00	-0.08	4.57	1.40	0.23 *
24	PBNOKR-1-18	37.38	2.36	1.08 *	4.43	0.57	0.27 **
25	PBNOKR-1-19	38.22	2.61	3.11 ***	4.18	0.88	0.05
26	PBNOKR-1-20	36.70	2.03	1.13*	4.57	0.38	0.93 ***
27	PBNOKR-1-21	38.60	1.33	0.04	4.13	1.40	0.05
28	PBNOKR-1-22	37.70	0.85	-0.29	4.33	0.94	-0.02
29	PBNOKR-2-1	38.27	2.77	0.26	4.33	1.40	0.35 **
30	PBNOKR-2-2	36.20	0.98	-0.29	4.32	1.40	-0.03
31	PBNOKR-2-3	37.48	4.28	-0.10	4.53	0.89	0.14 *
32	PBNOKR-2-4	37.98	1.93	3.75 ***	4.62	1.02	0.41 **
33	PBNOKR-2-5	38.73	1.45	-0.09	4.58	1.91	-0.04
34	PBNOKR-2-6	37.77	1.23	1.02 *	4.00	-0.38	-0.04
35	PBNOKR-2-7	36.62	1.87	-0.08	4.13	0.51	-0.04
36	PBNOKR-2-8	38.93	0.90	2.17**	4.28	2.35	0.27**
37	PBNOKR-2-9	37.37	-0.21	1.26 *	3.85	0.06	0.02
38	PBNOKR-2-10	37.17	1.87	3.14 ***	4.38	-1.91	0.08
39	PBNOKR-2-11	37.20	1.82	1.78 **	4.12	1.85	0.04
40	PBNOKR-3-1	39.90	0.66	1.13 *	4.37	1.85	0.04
41	PBNOKR-3-2	38.92	0.98	-0.29	4.59	5.12	-0.04
42	PBNOKR-3-3	39.15	0.24	0.31	4.60	1.72	0.02
43	PBNOKR-3-4	39.00	-0.17	0.15	4.18	0.81	0.07
44	PBNOKR-3-5	38.93	3.06	4.49 **	4.10	-1.12	0.54***
45	PBNOKR-3-6	38.88	1.51	1.82 **	4.44	0.25	-0.03
46	PBNOKR-3-7	39.35	0.65	-0.09	4.30	-0.78	-0.01
47	PBNOKR-3-8	39.43	-0.44	-0.28	4.62	0.91	-0.03
48	PBNOKR-3-9	39.50	-1.78	0.75	4.68	1.72	0.09
49	PBNOKR-3-10	39.17	0.52	-0.14	4.73	6.17*	-0.04
50	PBNOKR-3-11	39.48	-0.47	-0.02	4.83	2.35	0.01
51	PBNOKR-3-12	38.35	2.17	8.27 **	4.55	0.19	0.00
52	PBNOKR-3-13	39.07	-0.98	1.08 *	4.30	0.32	-0.04
53	PBNOKR-4-1	40.85	0.46*	-0.29	4.55	5.09*	-0.04
54	PBNOKR-4-2	40.00	-0.17	1.55 *	4.57	3.18	0.15 *
55	PBNOKR-4-3	39.10	-0.33	1.32 *	4.87	2.16	0.07
56	PBNOKR-4-4	41.22	-1.79	6.50 **	4.98	-0.57	-0.01
57	PBNOKR-4-5	39.65	0.73	0.60	4.45	-2.35*	-0.04
58	PBNOKR-4-6	40.70	1.76	1.16 *	4.88	-1.59	0.06

Sr.No.	Genotypes	Days to first flowering			First fruiting node		
		μ	bi	S²di	μ	bi	S²di
59	PBNOKR-4-7	40.48	1.65	-0.27	4.83	-2.23	0.03
60	PBNOKR-4-8	39.52	1.1	3.03 **	4.28	0.91	-0.03
61	PBNOKR-4-9	39.67	1.45	-0.28	4.73	-0.89	0.24 *
62	PBNOKR-4-10	40.22	-0.36	3.89 **	4.58	-0.45	0.03
63	Raadhika (Check)	37.48	-1.83	0.81	4.80	0.19	-0.03
	Mean	**38.52**			**4.40**		

* Significant at 5% level ** Significant at 1% level

Table 10 : Estimates of stability parameters for different yield attributing characters in okra

Sr.No.	Genotypes	Fruit length (cm)			Fruit width (cm)		
		M	bi	S²di	μ	Bi	S²di
1	PBNOK-2	10.40	-2.22	0.47	1.59	4.95	0.00
2	PBNOK-4	10.82	1.37	0.10	1.89	10.04	0.00
3	Parbhani Bhendi	10.28	-1.21	0.07	1.68	3.07	0.00
4	Parbhani Kranti	11.22	-1.12	0.46	1.67	0.98	0.00
5	Pusa Makhmali	10.37	-0.17	-0.22	1.36	-0.92*	0.00
6	VRO-103 (Check)	14.20	4.56	0.06	1.63	0.55	0.00
7	PBNOKR-1 -1	12.52	1.46	-0.13	1.44	0.16	0.01
8	PBNOKR – 1 -2	12.77	-7.64	-0.06	1.47	0.84	0.00
9	PBNOKR – 1- 3	13.28	4.91	2.52 ***	1.33	7.04	0.0**
10	PBNOKR -1-4	12.15	4.81	-0.12	1.43	-0.37	0.03**
11	PBNOKR -1-5	14.03	3.68	1.35 **	1.38	-4.56	0.00
12	PBNOKR-1-6	13.07	1.1	0.68	1.34	3.48	0.00
13	PBNOKR-1-7	12.30	-8.92*	-0.22	1.48	-1.67	0.00
14	PBNOKR-1-8	13.35	4.37	0.17	1.42	0.96	0.00
15	PBNOKR-1-9	12.90	9.18	0.67 *	1.38	0.87	0.00
16	PBNOKR-1-10	12.78	9.01*	-0.22	1.48	5.30	0.00
17	PBNOKR-1-11	13.05	0.95	1.83 **	1.49	-0.25	0.019*
18	PBNOKR-1-12	11.87	16.15	0.36	1.37	0.83	0.01
19	PBNOKR-1-13	13.33	2.08	1.61 **	1.36	-1.43	0.00
20	PBNOKR-1-14	13.20	2.84	-0.14	1.46	2.50	0.02 *
21	PBNOKR-1-15	12.20	10.31	0.90 *	1.36	-2.09	0.00
22	PBNOKR-1-16	12.78	-5.05	2.37 ***	1.41	-1.84	0.00
23	PBNOKR-1-17	12.43	7.29*	-0.23	1.37	-0.74	0.00
24	PBNOKR-1-18	12.42	6.96	-0.05	1.42	5.80	0.00
25	PBNOKR-1-19	13.70	0.83	0.22	1.52	1.0	0.00
26	PBNOKR-1-20	13.30	8.32	0.59	1.33	-4.05*	0.00
27	PBNOKR-1-21	12.65	-3.42	0.47	1.50	3.34	0.00
28	PBNOKR-1-22	12.85	0.83	0.64	1.58	0.89	0.01
29	PBNOKR-2-1	10.92	2.58	-0.22	1.37	2.09	0.021*
30	PBNOKR-2-2	12.70	1.71	0.90 *	1.43	4.81	0.00
31	PBNOKR-2-3	12.35	11.68	-0.15	1.37	-5.57	0.28***
32	PBNOKR-2-4	12.00	1.1	0.91	1.54	0.87	0.00
33	PBNOKR-2-5	11.63	12.21	4.76 ***	1.50	-4.25	0.01
34	PBNOKR-2-6	13.07	0.87	0.02	1.47	2.40	0.04 **
35	PBNOKR-2-7	11.85	-1.08	11.99***	1.54	-2.11	0.01
36	PBNOKR-2-8	10.58	0.80	0.49	1.61	1.38	0.00
37	PBNOKR-2-9	10.97	-9.09	0.98 *	1.54	4.40	0.016*
38	PBNOKR-2-10	12.85	4.11	0.90 *	1.56	2.97	0.02 *
39	PBNOKR-2-11	12.28	-10.28	2.45 ***	1.58	-2.49	0.00
40	PBNOKR-3-1	11.73	-6.11	4.14 ***	1.58	2.75	0.02 **
41	PBNOKR-3-2	11.25	0.87	0.14	1.57	2.59	0.00
42	PBNOKR-3-3	11.43	16.66	0.23	1.78	3.63	0.00
43	PBNOKR-3-4	10.73	0.90	0.13	1.53	0.80	0.00

Sr.No.	Genotypes	Fruit length (cm)			Fruit width (cm)		
		M	bi	S²di	µ	Bi	S²di
44	PBNOKR-3-5	10.30	13.26	21.17 **	1.63	5.09	0.00
45	PBNOKR-3-6	11.02	-2.23	-0.16	1.61	-4.88	0.03 **
46	PBNOKR-3-7	10.45	-7.45	1.17 *	1.74	1.88	0.00
47	PBNOKR-3-8	11.53	-6.20	3.85 ***	1.77	1.38	0.00
48	PBNOKR-3-9	11.13	1.91	4.37 ***	1.85	-3.88	0.014*
49	PBNOKR-3-10	11.10	8.08	0.13	1.83	5.07*	0.00
50	PBNOKR-3-11	11.28	-3.70	1.02 *	1.82	-3.16	0.00
51	PBNOKR-3-12	10.87	1.48	3.58***	1.74	2.00	0.01 *
52	PBNOKR-3-13	12.18	-1.99	3.22***	1.85	0.46	0.00
53	PBNOKR-4-1	11.42	7.04	-0.14	1.68	-0.88	0.00
54	PBNOKR-4-2	12.08	-12.64	5.15 ***	1.74	3.02	0.03 **
55	PBNOKR-4-3	13.20	-3.87	-0.03	1.67	4.16*	0.00
56	PBNOKR-4-4	11.50	-5.662*	-0.22	1.69	-0.03	0.00
57	PBNOKR-4-5	11.68	-2.22	1.37 **	1.64	-0.03	0.00
58	PBNOKR-4-6	13.20	1.10	2.17 **	1.75	1.08	0.01
59	PBNOKR-4-7	11.03	5.51	1.14 *	1.57	0.38	0.01
60	PBNOKR-4-8	12.03	0.91	0.67	1.56	0.99	0.00
61	PBNOKR-4-9	12.82	11.68	0.44	1.89	9.72	0.00
62	PBNOKR-4-10	12.35	1.63	-0.11	1.84	0.83	0.03 **
63	Raadhika (Check)	14.28	-1.80	-0.08	1.58	2.16	0.00
	Mean	**12.09**			**1.56**		

* Significant at 5% level ** Significant at 1% level

Table 11 : Estimates of stability parameters for different yield attributing characters in okra

Sr.No.	Genotypes	Fruit weight (g)			Total number of fruits/plant		
		µ	bi	S²di	µ	bi	S²di
1	PBNOK-2	9.08	0.55	-0.03	68.90	2.11	6.31
2	PBNOK-4	8.23	-1.02	0.10	69.38	0.43	-3.21
3	Parbhani Bhendi	7.62	0.49	0.12	78.87	1.82	-5.33
4	Parbhani Kranti	9.13	0.18	-0.06	84.10	0.49	0.84
5	Pusa Makhmali	8.53	-0.36	0.09	70.90	1.77	-6.53
6	VRO-103 (Check)	10.33	0.58	1.10***	85.43	-0.88	-2.91
7	PBNOKR-1 -1	9.53	2.62	1.85 ***	71.77	4.11	79.04 ***
8	PBNOKR – 1 -2	10.33	0.77	1.80 ***	78.27	-1.91	2.84
9	PBNOKR – 1- 3	9.73	0.48	0.21	72.83	3.44	-5.55
10	PBNOKR -1-4	9.00	0.13	5.01***	73.92	1.03	0.05 ***
11	PBNOKR -1-5	9.37	0.81	0.40 *	73.60	2.81	36.43 *
12	PBNOKR-1-6	9.97	-1.14	0.07	72.48	1.06	0.98**
13	PBNOKR-1-7	8.67	1.06	-0.07	74.57	0.55	-1.92
14	PBNOKR-1-8	8.68	2.97	0.60 **	65.43	0.26	0.70
15	PBNOKR-1-9	9.52	0.12	0.23 *	74.27	0.57	16.23
16	PBNOKR-1-10	8.73	1.41	1.08 ***	77.05	-0.50	9.52
17	PBNOKR-1-11	9.51	0.90*	-0.08	80.40	1.1	-7.19
18	PBNOKR-1-12	8.95	0.91	0.34 *	72.70	1.20	-7.30
19	PBNOKR-1-13	8.08	0.95	-0.01	82.07	0.33	3.71
20	PBNOKR-1-14	9.28	2.71	-0.04	68.20	0.30	46.06 **
21	PBNOKR-1-15	8.48	1.55	1.47 ***	72.30	-2.14	37.99 *
22	PBNOKR-1-16	9.07	3.27	0.40 *	76.63	1.72	-5.52
23	PBNOKR-1-17	8.25	3.05	0.26 *	78.25	1.52	31.77 *
24	PBNOKR-1-18	9.28	1.25	0.09	75.87	1.33	95.18 **
25	PBNOKR-1-19	9.33	0.82	0.08	76.77	0.92	9.54*
26	PBNOKR-1-20	8.10	1.18	-0.07	70.37	0.32	-6.70
27	PBNOKR-1-21	10.02	0.28*	-0.08	76.18	0.49	37.76 *
28	PBNOKR-1-22	9.23	0.92	-0.05	76.15	1.17	0.29
29	PBNOKR-2-1	9.63	-1.55	-0.06	75.53	0.42	-7.11

Sr.No.	Genotypes	Fruit weight (g)			Total number of fruits/plant		
		μ	bi	S²di	μ	bi	S²di
30	PBNOKR-2-2	8.58	4.10	3.11 *	73.20	-0.37	8.21
31	PBNOKR-2-3	8.37	2.24	0.14	74.92	-0.57	-2.98
32	PBNOKR-2-4	8.57	1.1	0.58	72.23	-0.37	-3.44
33	PBNOKR-2-5	9.23	-1.86*	-0.07	74.08	-0.63	1.12
34	PBNOKR-2-6	8.83	1.20	-0.05	74.05	0.80	-5.05
35	PBNOKR-2-7	9.62	-0.04	-0.03	78.32	0.06	7.08
36	PBNOKR-2-8	9.58	0.95	0.58	75.15	0.90	17.03
37	PBNOKR-2-9	9.37	3.28	-0.02	73.30	0.399*	-7.45
38	PBNOKR-2-10	9.30	1.08	0.57 **	76.42	1.36	-7.31
39	PBNOKR-2-11	9.47	2.08	0.23 *	73.65	0.34	17.84
40	PBNOKR-3-1	9.62	1.23	2.00 ***	51.73	2.99	29.62 *
41	PBNOKR-3-2	8.45	1.548*	-0.08	53.92	0.85	1.01
42	PBNOKR-3-3	10.05	1.50	0.57 **	46.75	1.60	6.58
43	PBNOKR-3-4	9.85	0.86	0.27	53.60	2.91	45.21 **
44	PBNOKR-3-5	9.23	-0.28*	-0.08	53.23	5.35	22.48 *
45	PBNOKR-3-6	9.78	1.97	3.13 **	49.12	2.45	40.72 *
46	PBNOKR-3-7	8.88	1.43	0.59 **	48.68	1.38	-4.66
47	PBNOKR-3-8	9.58	2.52	1.25 **	51.80	4.14	18.30
48	PBNOKR-3-9	9.22	1.35	0.02	54.02	3.91	91.53 ***
49	PBNOKR-3-10	9.22	1.83	1.26 **	50.65	1.57	26.82 *
50	PBNOKR-3-11	9.18	2.20*	-0.08	51.32	4.36	11.14
51	PBNOKR-3-12	9.87	0.70	0.44 *	55.82	5.45	78.72 ***
52	PBNOKR-3-13	9.22	1.94	0.15	55.28	4.46	74.13 **
53	PBNOKR-4-1	9.65	-0.37	0.95 **	60.53	-0.98	16.77
54	PBNOKR-4-2	8.50	0.15	0.04	65.48	-0.49	36.55 *
55	PBNOKR-4-3	9.35	0.05	-0.07	63.53	0.28	39.74 *
56	PBNOKR-4-4	8.65	-0.60	0.00	65.25	1.02	-0.15
57	PBNOKR-4-5	9.02	0.47*	-0.08	52.48	3.81	199.70**
58	PBNOKR-4-6	8.98	1.09	0.18	60.95	-3.31	122.14**
59	PBNOKR-4-7	8.55	-0.11	0.37 *	65.55	0.59	9.86
60	PBNOKR-4-8	8.78	1.1	-0.01	60.90	-2.40	22.3971 *
61	PBNOKR-4-9	8.40	0.58	-0.07	65.67	0.34	15.84
62	PBNOKR-4-10	9.22	0.87	0.69 **	61.05	-1.31*	-7.40
63	Raadhika (Check)	8.42	0.89	-0.08	79.65	1.1	2.47
	Mean	**9.10**			**68.18**		

* Significant at 5% level ** Significant at 1% level

Table 12 : Estimates of stability parameters for different yield attributing characters in okra

Sr.No.	Genotypes	Number of ridges /pod			Number of seeds/pod		
		μ	bi	S²di	μ	bi	S²di
1	PBNOK-2	5.27	2.31	-0.01	19.88	0.66	3.32 *
2	PBNOK-4	5.38	2.85	-0.03	23.95	0.26	11.82 **
3	Parbhani Bhendi	5.20	-0.80	-0.03	21.92	0.03	2.40
4	Parbhani Kranti	5.40	1.29	-0.01	26.13	0.49	0.74
5	Pusa Makhmali	5.23	0.27	-0.05	15.58	1.53	-0.81
6	VRO-103 (Check)	5.23	0.46	-0.05	21.80	2.95	-0.22
7	PBNOKR-1 -1	5.33	3.18*	-0.05	16.45	1.78	-1.06
8	PBNOKR – 1 -2	5.28	-1.66	0.00	18.60	0.95	0.33
9	PBNOKR – 1- 3	5.13	0.60	-0.03	21.55	2.62	-0.03
10	PBNOKR -1-4	5.40	-1.61	-0.05	19.23	1.28	2.79
11	PBNOKR -1-5	5.17	1.05	-0.03	19.13	2.59	0.53
12	PBNOKR-1-6	5.47	0.91	-0.01	21.45	1.02	0.02
13	PBNOKR-1-7	5.42	2.15	0.02	23.27	1.00	3.81 *
14	PBNOKR-1-8	5.23	0.27	-0.05	21.57	-0.30	5.61 *

Sr.No.	Genotypes	Number of ridges /pod			Number of seeds/pod		
		μ	bi	S^2di	μ	bi	S^2di
15	PBNOKR-1-9	5.33	2.80*	-0.05	25.03	-0.78	1.70
16	PBNOKR-1-10	5.23	-2.48	-0.04	22.12	-2.28	7.92 **
17	PBNOKR-1-11	5.48	-4.75	0.04	23.42	0.82	0.95
18	PBNOKR-1-12	5.23	-1.66	0.17 *	20.50	2.77	4.05 *
19	PBNOKR-1-13	5.27	-2.85	-0.03	22.28	1.24	12.07 **
20	PBNOKR-1-14	5.48	5.28	-0.04	19.72	-1.94	0.54
21	PBNOKR-1-15	5.27	-3.17	-0.05	26.88	0.15	-0.54
22	PBNOKR-1-16	5.18	-1.03	0.02	21.98	0.98	-0.86
23	PBNOKR-1-17	5.32	4.42	-0.05	22.88	-0.26	6.93 **
24	PBNOKR-1-18	5.23	0.91	-0.01	24.12	-1.55	13.25 **
25	PBNOKR-1-19	5.02	0.88	-0.05	22.35	0.82	-1.01
26	PBNOKR-1-20	5.32	2.80	0.01	24.57	2.39*	-1.10
27	PBNOKR-1-21	5.40	-0.81	-0.05	23.28	0.66	10.21 **
28	PBNOKR-1-22	5.20	0.93	-0.03	26.23	2.25	38.37 **
29	PBNOKR-2-1	5.43	2.70	-0.05	15.33	2.76	-0.15
30	PBNOKR-2-2	5.40	6.15	-0.05	19.03	1.54	-1.08
31	PBNOKR-2-3	5.47	2.63	0.05	20.03	0.15	0.33
32	PBNOKR-2-4	5.75	6.62	0.01	23.37	1.16	0.98
33	PBNOKR-2-5	5.55	2.74	0.08	17.20	0.76	0.12
34	PBNOKR-2-6	5.52	1.50	0.03	20.12	1.96	-1.07
35	PBNOKR-2-7	5.28	-0.21	-0.05	16.52	0.64	-0.87
36	PBNOKR-2-8	5.12	1.35	-0.04	21.12	0.92	0.11
37	PBNOKR-2-9	5.13	-1.67	-0.05	18.02	-0.46	18.52 **
38	PBNOKR-2-10	5.13	-2.00	-0.03	17.42	3.35	-0.74
39	PBNOKR-2-11	5.47	7.49*	-0.05	19.50	2.04	-0.65
40	PBNOKR-3-1	6.08	4.15	-0.03	14.82	-0.12	1.75
41	PBNOKR-3-2	5.92	2.66	0.42 **	13.90	0.38	-0.61
42	PBNOKR-3-3	6.23	2.21	-0.05	14.53	0.99	-0.29
43	PBNOKR-3-4	6.15	1.79	0.01	14.62	0.46	2.03
44	PBNOKR-3-5	6.20	0.98	-0.03	15.95	-1.70	2.71
45	PBNOKR-3-6	6.10	2.11	0.09	14.53	1.07	-0.48
46	PBNOKR-3-7	5.98	2.87	0.08	16.45	3.10	17.29 **
47	PBNOKR-3-8	6.02	4.47*	-0.05	17.28	3.06	-0.86
48	PBNOKR-3-9	6.07	-1.40	-0.05	15.38	1.59	-0.62
49	PBNOKR-3-10	6.15	1.13	-0.05	14.40	3.38	7.22 **
50	PBNOKR-3-11	6.03	4.95*	-0.05	15.03	0.69	2.13
51	PBNOKR-3-12	5.78	-2.47	0.10	16.58	1.05	-0.05
52	PBNOKR-3-13	5.93	5.78	0.27 *	14.83	2.06	-0.91
53	PBNOKR-4-1	6.35	2.91	-0.05	13.62	0.67	3.50 *
54	PBNOKR-4-2	6.07	-2.54	0.00	13.47	2.48	-1.03
55	PBNOKR-4-3	6.48	0.91	-0.01	13.53	1.19	0.18
56	PBNOKR-4-4	5.72	-1.06	0.36 **	13.33	0.73	3.78 *
57	PBNOKR-4-5	6.18	3.17	0.21 *	15.08	2.78	1.26
58	PBNOKR-4-6	6.40	-0.16	-0.05	12.52	1.74	2.96
59	PBNOKR-4-7	6.18	0.28	0.03	12.38	1.22	0.30
60	PBNOKR-4-8	6.20	0.81	-0.03	13.45	1.24	2.48
61	PBNOKR-4-9	6.32	-0.44	0.07	13.08	1.78	-0.84
62	PBNOKR-4-10	5.97	-5.28	-0.03	13.93	2.59	5.32 *
63	Raadhika (Check)	5.18	0.47	-0.02	25.58	0.92	0.44
	Mean	**5.60**			**18.75**		

* Significant at 5% level ** Significant at 1% level

Table 13 : Estimates of stability parameters for different yield attributing characters in okra

Sr. No.	Genotypes	Weight of 10 seeds(g)			Weight of 100seeds(g)		
		μ	bi	S^2di	μ	bi	S^2di
1	PBNOK-2	6.58	-7.22	-0.02	7.68	-0.22	-0.06
2	PBNOK-4	6.45	0.70	0.09	7.90	-1.58	-0.07
3	Parbhani Bhendi	6.37	-1.35	-0.02	7.65	0.00*	-0.10
4	Parbhani Kranti	7.47	-5.86*	-0.05	8.53	1.59	-0.01
5	Pusa Makhmali	6.82	-0.81	-0.03	8.62	1.25	0.03
6	VRO-103 (Check)	7.45	3.01	-0.03	9.10	1.64	0.28
7	PBNOKR-1 -1	5.72	1.65	0.03	7.18	0.82	-0.10
8	PBNOKR – 1 -2	6.35	4.15*	-0.05	7.63	8.56	0.02
9	PBNOKR – 1- 3	5.63	-5.37	0.11	8.53	4.04	0.14
10	PBNOKR -1-4	5.62	4.31	-0.01	6.50	5.24	-0.01
11	PBNOKR -1-5	6.67	0.96	0.07	8.12	0.90	0.89
12	PBNOKR-1-6	6.47	1.08	0.01	8.37	0.85	-0.02
13	PBNOKR-1-7	6.15	10.40	0.32 **	7.75	-2.19	0.24
14	PBNOKR-1-8	6.12	0.63	0.02	8.30	-3.06	-0.06
15	PBNOKR-1-9	5.98	3.63	0.85***	8.05	-4.80	-0.05
16	PBNOKR-1-10	5.90	-4.63*	-0.04	7.88	1.75	0.16
17	PBNOKR-1-11	6.10	0.87	0.00	8.13	0.90	0.30 *
18	PBNOKR-1-12	5.47	-4.40	0.38 **	7.75	-3.94	0.26
19	PBNOKR-1-13	6.23	-1.36*	-0.05	8.47	-1.36	-0.10
20	PBNOKR-1-14	5.98	-0.51	0.50 ***	7.80	0.59	0.40 *
21	PBNOKR-1-15	6.02	4.54	0.33 **	7.92	7.21	0.27
22	PBNOKR-1-16	6.32	-1.00	0.07	8.03	2.61	0.24
23	PBNOKR-1-17	5.63	7.11	0.07	8.30	3.38	-0.09
24	PBNOKR-1-18	6.25	2.59*	-0.05	7.70	-2.84	0.36 *
25	PBNOKR-1-19	6.13	0.87	0.23 *	8.57	0.99	-0.07
26	PBNOKR-1-20	6.17	1.53	0.48 ***	7.30	-2.13	0.16
27	PBNOKR-1-21	6.10	3.64	0.25 *	7.93	-2.90	0.90 **
28	PBNOKR-1-22	6.42	-0.97	0.02	8.40	0.97	-0.01
29	PBNOKR-2-1	5.60	-1.83	0.04	7.45	0.87	-0.05
30	PBNOKR-2-2	5.33	1.71	-0.04	7.03	-1.52	-0.10
31	PBNOKR-2-3	5.65	4.57	-0.04	7.08	-11.63	0.02
32	PBNOKR-2-4	5.38	0.98	-0.05	8.52	0.90	0.00
33	PBNOKR-2-5	5.47	0.88	0.00	7.55	-4.75	-0.08
34	PBNOKR-2-6	5.48	2.60	-0.01	7.07	2.18	-0.10
35	PBNOKR-2-7	5.60	-2.53	-0.04	7.37	1.31	-0.02
36	PBNOKR-2-8	5.68	4.62	0.06	7.55	1.97	-0.01
37	PBNOKR-2-9	5.78	8.87	-0.03	6.90	0.87	0.03
38	PBNOKR-2-10	5.60	1.22	-0.01	6.88	4.75	0.34 *
39	PBNOKR-2-11	5.72	3.22	0.02	7.40	1.86	-0.08
40	PBNOKR-3-1	6.03	-2.90	0.32 **	8.22	-0.05	-0.07
41	PBNOKR-3-2	5.72	-2.09	0.11	8.13	5.08	0.01
42	PBNOKR-3-3	5.80	10.24	-0.03	7.90	-3.98	0.22
43	PBNOKR-3-4	6.57	0.86	0.28**	8.13	0.93	0.24
44	PBNOKR-3-5	6.00	4.55	0.14 *	8.33	0.11	-0.09
45	PBNOKR-3-6	5.98	5.32*	-0.04	8.02	-1.91	-0.10
46	PBNOKR-3-7	5.60	4.60	0.34 **	8.48	0.76	-0.10
47	PBNOKR-3-8	5.77	6.61	-0.04	7.98	-3.76	-0.09
48	PBNOKR-3-9	5.70	5.40	0.06	8.02	5.95	0.12
49	PBNOKR-3-10	5.98	2.48	0.62 ***	8.23	4.59	0.10
50	PBNOKR-3-11	5.45	3.20	-0.04	8.55	1.26	-0.09
51	PBNOKR-3-12	5.37	1.14	0.05	8.15	1.15	-0.10
52	PBNOKR-3-13	5.92	-6.63	0.04	8.42	-0.71	-0.10
53	PBNOKR-4-1	6.27	-1.38	0.09	8.33	3.82	0.18
54	PBNOKR-4-2	6.03	-6.61*	-0.04	7.73	3.17	0.63 **

Sr. No.	Genotypes	Weight of 10 seeds(g)			Weight of 100seeds(g)		
		μ	bi	S²di	μ	bi	S²di
55	PBNOKR-4-3	6.43	-2.00	0.15 *	7.93	3.77	-0.08
56	PBNOKR-4-4	6.02	-5.06	0.05	8.28	-0.60	-0.03
57	PBNOKR-4-5	6.30	-2.78	0.00	7.70	2.58	1.05**
58	PBNOKR-4-6	6.43	0.53	0.10	8.70	1.47	0.01
59	PBNOKR-4-7	6.32	-7.08	-0.01	8.53	2.89	-0.05
60	PBNOKR-4-8	6.38	0.83	-0.02	8.02	0.96	0.41 *
61	PBNOKR-4-9	6.10	-4.86	0.08	8.55	-1.80	-0.10
62	PBNOKR-4-10	6.58	2.51	0.04	8.45	5.08	0.25
63	Raadhika (Check)	6.12	3.48	-0.04	9.09	0.94	-0.10
	Mean	**6.02**			**7.96**		

* Significant at 5% level ** Significant at 1% level

Table 14 : Estimates of stability parameters for different yield attributing characters in okra

Sr. No.	Genotypes	Total yield/plot(g)			Number of marketable fruit/plant		
		μ	bi	S²di	μ	bi	S²di
1	PBNOK-2	5375.50	1.97	-100996.80	17.15	-0.04	2.70
2	PBNOK-4	5728.30	0.79	-29660.60	21.77	0.15	12.17 **
3	Parbhani Bhendi	5103.50	-0.37	153297.30	19.63	-0.08	17.26**
4	Parbhani Kranti	7165.70	0.82	-78591.30	23.42	-0.17	2.14
5	Pusa Makhmali	3979.00	0.50	-107102.30	12.92	0.10	0.50
6	VRO-103 (Check)	6546.80	1.31	-12550.90	20.28	2.22*	-0.99
7	PBNOKR-1 -1	4617.20	0.94	34286.90	14.42	0.69	-0.18
8	PBNOKR – 1 -2	5911.20	0.30	2556492.7 **	16.48	0.86	0.15 *
9	PBNOKR – 1- 3	6358.70	2.25	376712.90	19.85	1.36	1.68
10	PBNOKR -1-4	5159.50	-0.02	1097188.8 **	16.72	0.67	9.11 **
11	PBNOKR -1-5	5345.70	0.89	-38921.90	18.17	0.85	0.55
12	PBNOKR-1-6	6414.20	0.84	-161860.80	22.55	2.80	-0.40
13	PBNOKR-1-7	6030.50	0.92	-137838.90	21.07	0.90	2.10
14	PBNOKR-1-8	5665.70	2.25	2781388.9 **	21.37	2.95	8.74 **
15	PBNOKR-1-9	7106.80	1.17	-92381.90	23.10	-0.86	-0.89
16	PBNOKR-1-10	5853.00	0.40	3826120.0 **	23.42	1.96	0.21
17	PBNOKR-1-11	6117.80	0.90	-130630.90	22.00	1.1	0.79 *
18	PBNOKR-1-12	5542.80	3.19	73578.30	19.80	3.28	7.52 **
19	PBNOKR-1-13	5380.80	-0.52	115617.00	20.02	0.84	-10.80 *
20	PBNOKR-1-14	5503.80	1.45	1496679.4 **	20.35	2.73*	-0.99
21	PBNOKR-1-15	6850.50	0.34	1729553.6 **	24.27	-0.27	-0.89
22	PBNOKR-1-16	5991.80	3.30	-52020.30	21.75	2.54	-0.84
23	PBNOKR-1-17	5724.50	2.60	2693067.6 **	21.43	0.46	6.99 **
24	PBNOKR-1-18	6746.30	2.28	1481018.8 **	23.97	1.34	6.12 **
25	PBNOKR-1-19	6253.00	0.88	405901.10	22.12	0.98	-0.38
26	PBNOKR-1-20	5970.50	1.68	-113292.90	22.33	1.02	-0.72
27	PBNOKR-1-21	6963.20	-1.09	408129.10	20.73	0.37	10.59 **
28	PBNOKR-1-22	7173.00	0..89	3802212.7 **	23.58	0.84	-23.83**
29	PBNOKR-2-1	4840.00	1.57	129067.70	15.98	4.03	1.18
30	PBNOKR-2-2	4869.00	1.65	1761049.6 **	17.78	0.97	-0.33
31	PBNOKR-2-3	5073.80	2.25	124401.40	19.40	3.18	2.78
32	PBNOKR-2-4	5479.30	0.98*	-140189.70	18.18	0.84	33.28 **
33	PBNOKR-2-5	5295.20	1.52	364362.80	18.12	3.15*	-0.92
34	PBNOKR-2-6	5324.70	1.50	-124516.90	18.03	1.47*	-0.99
35	PBNOKR-2-7	4772.50	0.66	-105326.20	15.02	-0.13	0.67
36	PBNOKR-2-8	6099.50	0.89	2115571.6 **	18.55	0.84*	-0.91
37	PBNOKR-2-9	5145.80	3.73	2394245.2 **	18.75	1.94	5.01*
38	PBNOKR-2-10	4972.20	3.08	527739.1 *	15.68	3.02	-0.11
39	PBNOKR-2-11	5719.50	3.21*	-140479.20	18.37	1.60	-0.13
40	PBNOKR-3-1	4255.70	0.58	228019.50	12.87	-0.08	3.79

Sr. No.	Genotypes	Total yield/plot(g)			Number of marketable fruit/plant		
		μ	bi	S²di	μ	bi	S²di
41	PBNOKR-3-2	3517.80	0.52	-141485.60	11.83	-0.03	-0.95
42	PBNOKR-3-3	4387.70	0.09	-134484.60	12.38	-0.93	1.58
43	PBNOKR-3-4	4393.70	-0.46	779668.0 *	13.55	-0.18	3.25
44	PBNOKR-3-5	4417.80	-1.81*	-134821.60	14.00	-1.02	6.05
45	PBNOKR-3-6	4281.00	2.00	491044.8 *	12.63	0.76	-0.55
46	PBNOKR-3-7	4383.30	0.82	2751315.3 **	14.15	1.89	12.01
47	PBNOKR-3-8	4925.50	2.16	-64588.30	15.02	1.58	0.63
48	PBNOKR-3-9	4254.50	1.20	59415.70	13.50	0.81	-0.58
49	PBNOKR-3-10	4002.30	1.70	2540401.1 **	13.20	1.75	-0.81
50	PBNOKR-3-11	4166.00	2.06	134495.50	13.23	0.51	2.20
51	PBNOKR-3-12	4928.20	1.78	-76888.70	14.25	0.06	-0.55
52	PBNOKR-3-13	4125.50	2.22	-43998.80	12.68	0.80	-0.27
53	PBNOKR-4-1	3958.00	-0.22	834058.6 **	12.13	0.45	1.47
54	PBNOKR-4-2	3423.00	1.07	37360.20	12.05	0.98	2.03
55	PBNOKR-4-3	3799.00	0.04	105515.10	11.68	0.00	-0.26
56	PBNOKR-4-4	3471.20	-0.64	391861.50	11.35	0.10	0.59
57	PBNOKR-4-5	4075.20	0.80	-712365.7 *	13.68	1.26	-0.92
58	PBNOKR-4-6	3366.50	0.56	544616.3 *	10.22	0.30	-0.69
59	PBNOKR-4-7	3188.80	0.36	401911.80	11.20	0.42	-0.62
60	PBNOKR-4-8	3536.50	0.37	188839.40	11.65	0.58	-0.71
61	PBNOKR-4-9	3292.50	0.72	26941.00	10.37	0.076*	-0.98
62	PBNOKR-4-10	3889.80	0.85	1695541.6 **	11.75	0.69	-0.60
63	Raadhika (Check)	6449.20	1.1	-1180829.2 **	23.02	1.17	12.26
	Mean	**5121.6**			**17.15**		

* Significant at 5% level ** Significant at 1% level

Table 15 : Estimates of stability parameters for different yield attributing characters in okra

Sr.No.	Genotypes	Marketable yield /plant(g)			YVMV infestation on plants (%)		
		μ	bi	S²di	μ	bi	S²di
1	PBNOK-2	156.30	0.69	192.70	0.00	0.00*	-2.11
2	PBNOK-4	178.50	1.17	-161.00	0.00	0.00*	-2.11
3	Parbhani Bhendi	150.00	0.39	1274.6 *	0.00	0.00*	-2.11
4	Parbhani Kranti	214.00	0.10	143.20	0.00	0.00*	-2.11
5	Pusa Makhmali	110.10	0.02	-177.20	0.55	0.99	-2.07
6	VRO-103 (Check)	207.70	1.20	-188.00	0.00	0.00*	-2.11
7	PBNOKR-1 -1	137.10	0.11	697.4 *	0.55	-1.24	-0.98
8	PBNOKR – 1 -2	171.40	-1.44	1458.6**	0.00	0.00*	-2.11
9	PBNOKR – 1- 3	193.90	2.44	-221.40	1.58	5.74	-1.82
10	PBNOKR -1-4	149.10	-0.63	1032.2 *	1.10	-1.99	-2.07
11	PBNOKR -1-5	176.90	2.66	422.60	1.55	2.87	-1.28
12	PBNOKR-1-6	224.20	2.42	593.60	0.00	0.00*	-2.11
13	PBNOKR-1-7	182.40	-0.06	-226.30	0.00	0.00*	-2.11
14	PBNOKR-1-8	183.70	2.58	1907.7**	2.20	1.51	4.13
15	PBNOKR-1-9	221.40	-0.05	-79.80	0.55	0.99	-2.07
16	PBNOKR-1-10	203.10	0.87	188.20	0.55	-0.75	-0.55
17	PBNOKR-1-11	191.70	0.65	312.50	0.00	0.00*	-2.11
18	PBNOKR-1-12	178.80	4.55*	-235.20	0.00	0.00*	-2.11
19	PBNOKR-1-13	161.10	-0.18	115.40	1.10	3.99	-1.97
20	PBNOKR-1-14	188.50	3.28	-219.00	0.50	1.81	-2.08
21	PBNOKR-1-15	191.70	1.12	-128.40	0.00	0.00*	-2.11
22	PBNOKR-1-16	166.10	3.81	3700.7**	0.55	1.99	-2.07
23	PBNOKR-1-17	178.60	0.86	3442.4**	1.65	0.49	3.23
24	PBNOKR-1-18	223.80	2.67	438.60	1.10	3.99	-1.97
25	PBNOKR-1-19	205.10	1.74	-236.10	0.40	0.85	-2.09

Sr.No.	Genotypes	Marketable yield /plant(g)			YVMV infestation on plants (%)		
		μ	bi	S^2di	μ	bi	S^2di
26	PBNOKR-1-20	181.10	1.06	-75.80	0.00	0.00*	-2.11
27	PBNOKR-1-21	205.80	-0.46	802.0 *	1.65	3.23	-1.34
28	PBNOKR-1-22	217.70	0.94	2814.8**	0.00	0.00*	-2.11
29	PBNOKR-2-1	155.30	3.75	3463.7**	1.28	1.42	-0.39
30	PBNOKR-2-2	129.60	-2.97	3764.2**	0.00	0.00*	-2.11
31	PBNOKR-2-3	138.80	3.88	2376.1**	0.77	2.78	-2.04
32	PBNOKR-2-4	167.80	0.96	-1958.**	0.00	0.00	-1.34
33	PBNOKR-2-5	153.10	2.88	1488.0**	0.55	1.99	-2.07
34	PBNOKR-2-6	158.70	0.84*	-237.70	1.75	3.59	-1.40
35	PBNOKR-2-7	144.50	-0.25	-113.00	0.00	0.00*	-2.11
36	PBNOKR-2-8	178.80	0.92	-1561.3*	1.71	0.99	0.02
37	PBNOKR-2-9	177.00	3.15	1215.4 *	2.37	3.08	2.16
38	PBNOKR-2-10	147.40	4.01	-38.00	1.65	3.23	-1.34
39	PBNOKR-2-11	173.80	2.30	-218.40	1.10	-2.48	2.40
40	PBNOKR-3-1	122.80	0.66	-38.90	0.55	0.99	-2.07
41	PBNOKR-3-2	90.60	0.10	-52.10	0.87	3.14	-2.02
42	PBNOKR-3-3	123.50	-0.60	-230.60	1.65	2.75	-0.04
43	PBNOKR-3-4	133.30	0.11	389.60	0.00	0.00	-1.97
44	PBNOKR-3-5	129.20	-1.68	2.30	0.55	-0.75	-0.55
45	PBNOKR-3-6	124.00	2.15	-205.20	1.25	4.53	-1.92
46	PBNOKR-3-7	125.60	1.92	1189.00	1.10	-2.48	2.40
47	PBNOKR-3-8	142.60	1.14	436.50	1.65	0.49	3.23
48	PBNOKR-3-9	124.30	1.04	-227.50	0.67	2.42	-2.05
49	PBNOKR-3-10	122.70	2.68	-131.50	0.00	0.00*	-2.11
50	PBNOKR-3-11	122.20	1.15	510.50	3.08	-0.38	3.79
51	PBNOKR-3-12	141.40	0.87	-141.50	1.10	3.99	-1.97
52	PBNOKR-3-13	114.30	1.89	48.80	0.00	0.00*	-2.11
53	PBNOKR-4-1	117.50	0.75	317.90	0.00	0.00*	-2.11
54	PBNOKR-4-2	102.10	1.01	-165.30	1.10	-1.51	4.13
55	PBNOKR-4-3	108.50	-0.15	-206.80	1.22	1.18	-0.45
56	PBNOKR-4-4	83.20	-1.869*	-223.80	1.10	1.24	-0.98
57	PBNOKR-4-5	123.30	1.18	-161.00	0.00	0.00*	-2.11
58	PBNOKR-4-6	97.70	0.57	-70.60	0.55	1.99	-2.07
59	PBNOKR-4-7	96.00	0.67	-118.50	0.00	0.00*	-2.11
60	PBNOKR-4-8	102.20	0.71	-234.20	1.10	-2.48	2.40
61	PBNOKR-4-9	87.10	0.06	-232.00	2.20	2.48	2.40
62	PBNOKR-4-10	108.50	1.22	-167.00	0.00	0.00*	-2.11
63	Raadhika (Check)	193.30	1.08	706*	0.00	0.00*	-2.11
	Mean	**154.10**			**0.78**		

* Significant at 5% level ** Significant at 1% level

References

Adeniji, O.T. & Kehinde, O.B.(2012). Genetic variability and heritability of seed yield components in West African okra (*Abelmoschus caillei* (*A. Chev*). *Asset International Journal*. **3**, 81-89.

Alam, K., Singh, MK., Kumar, M., Singh, A., Kumar, V., Ahmad, M. & Keshari, D. (2020). Estimation of genetic variability, correlation and path coefficient in okra (*Abelmoschus esculentus* L. Moench). *Journal Pharmacognisant Phytochemistry* **9**, 1484-87.

Berry, S.K., Kalra, C.L., Sehgal, R. C., Kulkarni, S. G., Arora, S. K. & Sharma, B.R. (1988). Quality characteristics of seed of five okra cultivars. *Journal of Food Science and Technology.* **25**, 303-05.

Chandramouli, B., Srihari, D., Rao, A.V.D.D. & Rao, M.P. (2016). Studies on genetic variability, heritability and genetic advance in okra [*Abelmoschus esculentus* (L.)

Dhall , R.K., Arora , S.K. & Mamta, R.(2000). Correlation and path analysis in advanced generations of okra [*Abelmoschus esculentus* (L.) Moench.]. *Indian Journal of Horticulture*. **57**(4), 342 - 46.

Eberhart, S. A. & Russel, W. A. (1966). Stability parameters for comparing varieties. *Crop Sciences.* **6**, 36-40.

Finlay, K. W., & Wilkinson, G. N., (1963). The analysis of adaptation in plant breeding programme. *Australian Journal of Agricultural Research.* **14**, 742-54.

Hussein, M. A., Bjornstad, A. & Aastveit, A. H. (2000). A SAS programme for computing genotype x environment stability statistics. *Agronomy Journal.* **92**, 454- 459.

Jindal, S.K., Arora D. & Ghai, T.R. (2008). Stability analysis for earliness in okra [*Abelmoschus esculentus* (L.) Moench]. *Journal of Research Punjab Agricultural University.* **45**(3 & 4), 148-155.

Kachhadia, V.H., Dangaria, C.J., Vachhani, J.H., Jivani, L.L. & Shekhat, H.G. (2011). Stability analysis in okra [*Abelmoschus esculentus* (L.) Moench]. *International Journal of Plant Sciences.* **6**(1), 34-39.

Khan, H.S., Ahmed, N. & Jabeen, N. (2005). Variability and correlation studies in okra (*Abelmoschus esculentus* (L.) Moench.). *Journal of Research, SKUAST-J*. **4**(2), 179-83.

Mishra, A., Mishra, H.N., Senapati, N. & Tripathy, P. (2015). Genetic variability and Correlation studies in okra *[Abelmoschus esculentus* (L.) Moench]. *Electronic Journal of Plant Breeding*. **6**(3), 866-869.

Moench.] genotypes. Plant Archives. **16**(2), 679-682.

NHB, 2013. Commodity wise Status. *Indian Horticulture Database*. National Horticulture Board, New Delhi.

Niranjan, R.S.& Mishra, M. N. (2003). Correlation and path coefficient analysis in okra (*Abelmoschus esculentus* (L) Moench. *Progress. Hortic.* **35**(2), 192-195.

Patil, S.S., Desai, D.T., Patil, P.P. & Patel, S.R. (2017). Genotype x environment interaction for fruit yield and component characters in okra [*Abelmoschus esculentus* (L.) Moench]. *Electronic Journal of Plant Breeding.* **8**(3), 787-791

Prakash, M., Satish, D., Alloli, T.B., Mansur, C.P., Raghvendra, S., Venkateshlu & Hadimani, H.P. (2017). Assessment of genotype x environment interaction and stability analysis in okra [*Abelmoschus esculentus* (L.) Moench] genotypes for growth and yield components. *International Journal of Current Microbiology and Applied Sciences.* **6**(10), 372-379.

Purewal, S.S. & Randhawa, G.S. (1947). Studies in *Hibiscus esculentus* L. *Indian Journal of Agricultural Science*. **17**, 129-136.

Reddy, M.T., Babu, K.B., Mutyala, G., Reddy, K. C., Begum, H., Reddy, K. & Songklanakarin, B. (2013). Correlation and path coefficient analysis of quantitative characters in okra (*Abelmoschus esculentus* (L.) Moench). *Journal of Science and Technology* **35**(3), 243-250.

Sabaghnia, N., Dehghani, H. & Sabaghpour, S.H. (2006). Nonparametric methods for interpreting genotype x environment interaction of lentil genotypes. *Crop Sciences.* **46**, 1100-1106.

Saifullah, M. & Rabbani, M.G. (2009). Evaluation and characterization of okra *(Abelmoschus esculentus* L. Moench.) genotypes. *SAARC Journal of Agriculture.***7**(1), 92-99.

Sharma, R. K., Singh, R.S., Kumar, A., Singh, A.K. & Choudhary, S.K. (2019). Genotype x Environment interaction and stability parameters of genotypes for different traits in *bhindi* [*Abelmoschus esculentus* (L.) Moench]. *International Journal of Current Microbiology and Applied Sciences.* **8**(6), 3300-3310.

Singh, N., Singh, D.K., Sati, U.C., Rawat, M. and Pandey, P. (2017). Genetic analysis studies in okra *[Abelmoschus esculentus* (L.) Moench]. *International Journal of Pure and Applied Biosciences* **5**(4), 361-367.

Sravanthi, U., Prabhakar, B. N., Saidaiah, P., Rao, A. M., Narayana, D.L., & Sathish, G. (2021). Studies on genetic variability in okra (*Abelmoschus esculentus* (L.) Moench). *The Pharma Innovation Journal,* **10**(11), 151-155.