

Experiment No. :5							
1.	Title of experiment	:	OKRA (YVMV)VARIETAL RESISTANT AVT-II				
2.	Location	:	Regional Horticultural Research Station, A.C.H., N.A.U., Navsari				
3.	Agro-ecological situation	:	South Gujarat Heavy Rainfall Zone, AES-III				
4.	Name of Investigator	:	PI: Dr. J.M. Vashi Co-PI: Dr. A.I .Patel & Dr.C.G.Intwala Asso. PI: Dr.H.R.Rathod				
5.	Year and Season	:	<i>Kharif-2024</i>				
6.	Experimental detail	:					
	(a) Design	:	RBD				
	(b) No. of Entries	:	9				
			1.	2022/ OKYVVARRES-1	6.	2022/ OKYVVARRES-6	
			2.	2022/ OKYVVARRES-2	7.	2022/ OKYVVARRES-7	
			3.	2022/ OKYVVARRES-3	8.	2022/ OKYVVARRES-8	
			4.	2022/ OKYVVARRES-4	9	2022/ OKYVVARRES-9	
			5.	2022/ OKYVVARRES-5			
	(c) Replication	:	3				
	(d) Plot Size	:	3.0 m X 2.7 m				
	(e) Spacing	:	60 cm X 30 cm				
	(f) Fertilizer NPK kg/ha	:	150-100-100				
	(g) Date of sowing	:	28/07/2024				
	(h) Date of first picking	:	12/09/2024				
	(i) Date of last picking	:	25/10/2024				
7.	Methodology	:	Observations were recorded as per the guideline provided by PC cell, IIVR, Varanasi.				
8.	Research results	:	Table -1 to Table – 16				

Table 7.YVMV Count at end of trial at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

YVMV Count at end of trial										
Sr. No.	Entries/Genotype	Number				PDI Range				Reaction
		RI	RII	RIII	Me an	RI	RII	RII I	Mea n	
1	2022/OKYVVARRES-1	0	0	0	0	0	0	0	0	Imuune
2	2022/OKYVVARRES-2	0	0	0	0	0	0	0	0	Imuune
3	2022/OKYVVARRES-3	0	0	0	0	0	0	0	0	Imuune
4	2022/OKYVVARRES-4	0	0	0	0	0	0	0	0	Imuune
5	2022/OKYVVARRES-5	0	0	0	0	0	0	0	0	Imuune
6	2022/OKYVVARRES-6	0	0	0	0	0	0	0	0	Imuune
7	2022/OKYVVARRES-7	0	0	0	0	0	0	0	0	Imuune
8	2022/OKYVVARRES-8	5	4	3	4	2.2 2	1.7 7	1.3 3	1.77	Resistance
9	2022/OKYVVARRES-9	0	0	0	0	0	0	0	0	Imuune

Table 8. ELCV Infection (%) at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

Sr. No.	Entries/Genotype	ELCV Infection (%)
1	2022/OKYVVARRES-1	0.00
2	2022/OKYVVARRES-2	0.00
3	2022/OKYVVARRES-3	0.00
4	2022/OKYVVARRES-4	0.00
5	2022/OKYVVARRES-5	0.00
6	2022/OKYVVARRES-6	0.00
7	2022/OKYVVARRES-7	0.00
8	2022/OKYVVARRES-8	1.33
9	2022/OKYVVARRES-9	0.00

Table 9. Marketable fruit yield (kg/plot) at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

Fruit yield (kg/plot)					
Sr. No.	Entries/Genotype	RI	RII	RIII	Mean
1	2022/OKYVVARRES-1	7.52	6.55	6.63	6.90
2	2022/OKYVVARRES-2	6.69	5.78	7.32	6.60
3	2022/OKYVVARRES-3	6.78	7.02	5.55	6.45
4	2022/OKYVVARRES-4	5.72	5.63	6.70	6.02
5	2022/OKYVVARRES-5	6.33	6.85	5.80	6.33
6	2022/OKYVVARRES-6	6.33	5.88	6.92	6.38
7	2022/OKYVVARRES-7	9.33	8.62	9.22	9.06
8	2022/OKYVVARRES-8	6.88	5.78	6.33	6.33
9	2022/OKYVVARRES-9	7.02	6.35	6.89	6.75
S. Em ±		0.32			
CD at 5%		0.96			
CV%		8.25			

Table 10. Marketable fruit yield (q/ha) at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

Fruit yield (q/ha)					
Sr. No.	Entries/Genotype	RI	RII	RIII	Mean
1	2022/OKYVVARRES-1	92.84	80.86	81.85	85.19
2	2022/OKYVVARRES-2	82.59	71.36	90.37	81.44
3	2022/OKYVVARRES-3	83.70	86.67	68.52	79.63
4	2022/OKYVVARRES-4	70.62	69.51	82.72	74.28
5	2022/OKYVVARRES-5	78.15	84.57	71.60	78.11
6	2022/OKYVVARRES-6	78.15	72.59	85.43	78.72
7	2022/OKYVVARRES-7	115.19	106.42	113.83	111.81
8	2022/OKYVVARRES-8	84.94	71.36	78.15	78.15
9	2022/OKYVVARRES-9	86.67	78.40	85.06	83.37
S. Em ±		3.97			
CD at 5%		11.91			
CV%		8.25			

Table 11. Average weight of single fruit (g) at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

Average Single fruit weight (g)					
Sr. No.	Entries/Genotype	RI	RII	RIII	Mean
1	2022/OKYVVARRES-1	10.70	10.02	9.90	10.21
2	2022/OKYVVARRES-2	9.30	10.30	10.20	9.93
3	2022/OKYVVARRES-3	10.54	10.30	9.35	10.06
4	2022/OKYVVARRES-4	9.70	9.36	10.20	9.75
5	2022/OKYVVARRES-5	11.33	10.66	10.50	10.83
6	2022/OKYVVARRES-6	11.20	10.10	11.26	10.85
7	2022/OKYVVARRES-7	12.30	11.90	11.80	12.00
8	2022/OKYVVARRES-8	10.30	11.60	9.80	10.57
9	2022/OKYVVARRES-9	9.45	11.20	10.45	10.37
S. Em ±		0.37			
CD at 5%		1.11			
CV%		6.09			

Table 12. Fruit Length (cm) at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

Fruit Length (cm)					
Sr. No.	Entries/Genotype	RI	RII	RIII	Mean
1	2022/OKYVVARRES-1	10.79	10.25	8.88	9.97
2	2022/OKYVVARRES-2	9.20	10.35	9.85	9.80
3	2022/OKYVVARRES-3	9.77	10.55	9.72	10.01
4	2022/OKYVVARRES-4	9.25	10.78	9.55	9.86
5	2022/OKYVVARRES-5	9.45	8.78	9.88	9.37
6	2022/OKYVVARRES-6	9.25	9.85	10.10	9.73
7	2022/OKYVVARRES-7	11.30	10.90	11.45	11.22
8	2022/OKYVVARRES-8	9.20	9.33	9.66	9.40
9	2022/OKYVVARRES-9	9.20	8.88	9.55	9.21
S. Em ±		0.34			
CD at 5%		1.02			
CV%		5.99			

Table 13. Fruit Girth (cm) at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

Fruit Girth (cm)					
Sr. No.	Entries/Genotype	RI	RII	RIII	Mean
1	2022/OKYVVARRES-1	4.66	4.78	5.12	4.85
2	2022/OKYVVARRES-2	4.92	5.12	4.88	4.97
3	2022/OKYVVARRES-3	5.10	4.30	5.10	4.83
4	2022/OKYVVARRES-4	4.98	4.66	5.04	4.89
5	2022/OKYVVARRES-5	4.85	5.19	5.12	5.05
6	2022/OKYVVARRES-6	5.10	5.08	4.80	4.99
7	2022/OKYVVARRES-7	5.35	5.78	6.30	5.81
8	2022/OKYVVARRES-8	4.85	4.66	5.10	4.87
9	2022/OKYVVARRES-9	5.10	4.89	4.75	4.91
S. Em ±		0.16			
CD at 5%		0.48			
CV%		5.47			

Table 14. Plant height at harvest (cm) at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

Plant height at harvest (cm)					
Sr. No.	Entries/Genotype	RI	RII	RIII	Mean
1	2022/OKYVVARRES-1	125.20	120.20	110.20	118.53
2	2022/OKYVVARRES-2	116.40	122.40	122.20	120.33
3	2022/OKYVVARRES-3	122.40	123.40	147.20	131.00
4	2022/OKYVVARRES-4	122.80	135.20	120.60	126.20
5	2022/OKYVVARRES-5	110.60	130.40	122.80	121.27
6	2022/OKYVVARRES-6	120.40	144.20	122.60	129.07
7	2022/OKYVVARRES-7	145.80	130.60	145.60	140.67
8	2022/OKYVVARRES-8	115.60	100.80	130.20	115.53
9	2022/OKYVVARRES-9	120.40	122.60	133.80	125.60
S. Em ±		5.98			
CD at 5%		17.94			
CV%		8.27			

Table 15. Number of fruits per plant at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

Number of fruits per plant					
Sr. No.	Entries/Genotype	RI	RII	RIII	Mean
1	2022/OKYVVARRES-1	11.60	11.00	12.00	11.53
2	2022/OKYVVARRES-2	10.60	11.40	11.20	11.07
3	2022/OKYVVARRES-3	12.20	11.20	11.60	11.67
4	2022/OKYVVARRES-4	10.60	10.40	12.40	11.13
5	2022/OKYVVARRES-5	11.20	10.80	11.80	11.27
6	2022/OKYVVARRES-6	12.40	14.60	13.60	13.53
7	2022/OKYVVARRES-7	11.40	12.40	11.60	11.80
8	2022/OKYVVARRES-8	12.00	11.60	9.20	10.93
9	2022/OKYVVARRES-9	10.20	11.20	9.20	10.20
S. Em ±		0.53			
CD at 5%		1.59			
CV%		8.02			

Table 16. Ancillary Observations at Navsari centre (Okra YVMV Varietal Resistant AVT-II)

Sr. No.	Entries/Genotype	Number of ridges/fruit	Fruit colour	Fruit texture
1	2022/OKYVVARRES-1	5.00	Green	Smooth
2	2022/OKYVVARRES-2	5.00	Green	Smooth
3	2022/OKYVVARRES-3	5.00	Green	Smooth
4	2022/OKYVVARRES-4	5.00	Green	Smooth
5	2022/OKYVVARRES-5	5.00	Green	Smooth
6	2022/OKYVVARRES-6	5.00	Green	Smooth
7	2022/OKYVVARRES-7	5.00	Green	Smooth
8	2022/OKYVVARRES-8	5.00	Green	Smooth
9	2022/OKYVVARRES-9	5.00	Green	Smooth

Conclusion:

In this trial total nine entries were tested. Marketable fruit yield difference was significant among entries evaluated. With 111.81 q/ha marketable fruit yield, 2022/OKYVVARRES-7 was found highly significant.

