

<b>Experiment No. : 9</b>							
<b>1.</b>	<b>Title of experiment</b>	:	<b>BRINJAL (ROUND) AVT- I</b>				
<b>2.</b>	<b>Location</b>	:	Regional Horticultural Research Station, A.C.H., N.A.U., Navsari				
<b>3.</b>	<b>Agro-ecological situation</b>	:	South Gujarat Heavy Rainfall Zone, AES-III				
<b>4.</b>	<b>Name of Investigator</b>	:	PI: Dr.J.M.Vashi Co-PI: Dr.H.R.Rathod Asso. PI: Dr.N.K.Patel				
<b>5.</b>	<b>Year and Season</b>	:	<i>Rabi</i> 2024-2025				
<b>6.</b>	<b>Experimental detail</b>	:					
	<b>(a) Design</b>	:	RBD				
	<b>(b) No. of Entries</b>	:	11				
			1.	2023/BRRVAR-1	7.	2023/BRRVAR -8	
			2.	2023/BRRVAR-2	8.	2023/BRRVAR-9	
			3.	2023/BRRVAR-3	9.	2023/BRRVAR-10	
			4.	2023/BRRVAR-4	10.	2023/BRRVAR-11	
			5.	2023/BRRVAR-5	11.	2023/BRRVAR-12	
			6.	2023/BRRVAR-7			
	<b>(c) Replication</b>	:	3				
	<b>(d) Plot Size</b>	:	4.5 m X 4.2 m				
	<b>(e) Spacing</b>	:	75 cm X 60 cm				
	<b>(f) Fertilizer NPK kg/ha</b>	:	100-50-50				
	<b>(g) Date of seed sowing</b>	:	20/10/2024				
	<b>(h) Date of transplanting</b>	:	22/11/2024				
	<b>(i) Date of first picking</b>	:	10/2/2025				
	<b>(j) Date of last picking</b>	:	15/5/2025				
<b>7.</b>	<b>Methodology</b>	:	As per the guideline given by PC cell				
<b>8.</b>	<b>Research results</b>	:	Table -1 to Table – 8				
<p><b>Note: 2023/BRRVAR-6 entry was not received so it was not included in experiment.As per your seed lot dispatched on 11/07/2024.</b></p>							

**Table 1. Days to first marketable fruit maturity (Brinjal Round - AVT- I)**

<b>Days to first marketable fruit maturity</b>					
<b>Sr. No.</b>	<b>Entries/Genotype</b>	<b>RI</b>	<b>RII</b>	<b>RIII</b>	<b>Mean</b>
1	2023/BRRVAR-1	72.00	65.00	72.00	69.67
2	2023/BRRVAR-2	69.00	69.00	73.00	70.33
3	2023/BRRVAR-3	69.00	72.00	66.00	69.00
4	2023/BRRVAR-4	68.00	73.00	72.00	71.00
5	2023/BRRVAR-5	67.00	73.00	68.00	69.33
6	2023/BRRVAR-7	70.00	73.00	72.00	71.67
7	2023/BRRVAR-8	72.00	74.00	68.00	71.33
8	2023/BRRVAR -9	73.00	68.00	73.00	71.33
9	2023/BRRVAR-10	72.00	75.00	73.00	73.33
10	2023/BRRVAR-11	72.00	74.00	69.00	71.67
11	2023/BRRVAR-12	66.00	73.00	71.00	70.00
<b>SEm±</b>		<b>1.65</b>			
<b>CD at 5%</b>		<b>NS</b>			
<b>CV%</b>		<b>4.03</b>			

**Table 2. Marketable fruit yield (kg/plot) (Brinjal Round - AVT- I)**

<b>Marketable fruit yield (kg/plot)</b>					
<b>Sr. No.</b>	<b>Entries/Genotype</b>	<b>RI</b>	<b>RII</b>	<b>RIII</b>	<b>Mean</b>
1	2023/BRRVAR-1	44.36	50.28	47.36	47.33
2	2023/BRRVAR-2	75.92	74.68	70.33	73.64
3	2023/BRRVAR-3	45.96	42.37	46.77	45.03
4	2023/BRRVAR-4	60.38	54.48	49.36	54.74
5	2023/BRRVAR-5	49.96	65.09	62.77	59.27
6	2023/BRRVAR-7	44.14	49.62	48.67	47.48
7	2023/BRRVAR-8	43.95	48.59	46.30	46.28
8	2023/BRRVAR -9	68.33	64.75	52.25	61.78
9	2023/BRRVAR-10	70.34	66.84	54.95	64.04
10	2023/BRRVAR-11	55.36	59.72	51.23	55.44
11	2023/BRRVAR-12	60.97	52.39	44.57	52.65
<b>SEm±</b>		<b>3.05</b>			
<b>CD at 5%</b>		<b>8.99</b>			
<b>CV%</b>		<b>9.55</b>			

**Table 3. Marketable fruit yield (q/ha) (Brinjal Round - AVT- I)**

Marketable fruit yield (q/ha)					
Sr. No.	Entries/Genotype	RI	RII	RIII	Mean
1	2023/BRRVAR-1	234.71	266.03	250.58	250.44
2	2023/BRRVAR-2	401.69	395.13	372.12	<b>389.65</b>
3	2023/BRRVAR-3	243.17	224.18	247.46	238.27
4	2023/BRRVAR-4	319.47	288.25	261.16	289.63
5	2023/BRRVAR-5	264.34	344.39	332.12	313.62
6	2023/BRRVAR-7	233.54	262.54	257.51	251.20
7	2023/BRRVAR-8	232.54	257.09	244.97	244.87
8	2023/BRRVAR -9	361.53	342.59	276.46	326.86
9	2023/BRRVAR-10	372.17	353.65	290.74	338.85
10	2023/BRRVAR-11	292.91	315.98	271.06	293.32
11	2023/BRRVAR-12	322.58	277.21	235.84	278.55
<b>SEm±</b>		<b>16.12</b>			
<b>CD at 5%</b>		<b>47.56</b>			
<b>CV%</b>		<b>9.55</b>			

**Conclusion:**

Total eleven genotypes were evaluated under Brinjal (Round) AVT- I trial. Differences among the genotypes for fruit yield were found significant. Genotype 2023/BRRVAR-2 exhibited significantly higher fruit yield (389.65 q/ha), 2023/BRRVAR-2 was found promising at Navsari centre.

**Table 4. Average weight of single fruit (g) (Brinjal Round - AVT- I)**

<b>Average weight of single fruit (g)</b>					
<b>Sr. No.</b>	<b>Entries/Genotype</b>	<b>RI</b>	<b>RII</b>	<b>RIII</b>	<b>Mean</b>
1	2023/BRRVAR-1	43.98	52.33	36.75	44.35
2	2023/BRRVAR-2	62.92	56.66	56.34	58.64
3	2023/BRRVAR-3	47.30	42.60	45.72	45.21
4	2023/BRRVAR-4	46.62	39.75	44.67	43.68
5	2023/BRRVAR-5	41.77	43.33	46.22	43.77
6	2023/BRRVAR-7	42.70	44.38	41.19	42.76
7	2023/BRRVAR-8	54.36	51.29	47.20	50.95
8	2023/BRRVAR -9	52.44	46.39	51.14	49.99
9	2023/BRRVAR-10	47.93	49.55	43.33	46.94
10	2023/BRRVAR-11	42.22	48.20	42.51	44.31
11	2023/BRRVAR-12	55.47	59.66	51.10	55.41
<b>SEm±</b>		<b>2.13</b>			
<b>CD at 5%</b>		<b>6.29</b>			
<b>CV%</b>		<b>7.73</b>			

**Table 5. Fruit length (cm) (Brinjal Round - AVT- I)**

<b>Fruit length (cm)</b>					
<b>Sr. No.</b>	<b>Entries/Genotype</b>	<b>RI</b>	<b>RII</b>	<b>RIII</b>	<b>Mean</b>
1	2023/BRRVAR-1	4.33	4.15	4.66	4.38
2	2023/BRRVAR-2	5.66	4.92	5.35	5.31
3	2023/BRRVAR-3	5.33	4.69	4.14	4.72
4	2023/BRRVAR-4	4.13	4.07	4.26	4.15
5	2023/BRRVAR-5	4.22	5.33	4.77	4.77
6	2023/BRRVAR-7	4.19	4.68	4.22	4.36
7	2023/BRRVAR-8	4.55	4.75	4.30	4.53
8	2023/BRRVAR -9	4.95	4.67	4.82	4.81
9	2023/BRRVAR-10	4.83	4.70	5.12	4.88
10	2023/BRRVAR-11	4.46	4.66	4.77	4.63
11	2023/BRRVAR-12	4.68	4.33	4.52	4.51
<b>SEm±</b>		<b>0.20</b>			
<b>CD at 5%</b>		<b>0.58</b>			
<b>CV%</b>		<b>6.64</b>			

**Table 6. Fruit diameter (cm) (Brinjal Round - AVT- I)**

<b>Fruit diameter (cm)</b>					
<b>Sr. No.</b>	<b>Entries/Genotype</b>	<b>RI</b>	<b>RII</b>	<b>RIII</b>	<b>Mean</b>
1	2023/BRRVAR-1	4.55	4.22	4.40	4.39
2	2023/BRRVAR-2	5.37	5.69	4.96	5.34
3	2023/BRRVAR-3	4.38	4.62	4.77	4.59
4	2023/BRRVAR-4	4.12	4.88	4.36	4.45
5	2023/BRRVAR-5	4.19	4.88	4.37	4.48
6	2023/BRRVAR-7	4.45	4.09	4.66	4.40
7	2023/BRRVAR-8	4.88	4.47	5.02	4.79
8	2023/BRRVAR -9	5.12	4.60	4.85	4.86
9	2023/BRRVAR-10	4.99	5.02	4.47	4.83
10	2023/BRRVAR-11	4.09	4.58	4.33	4.33
11	2023/BRRVAR-12	4.55	5.09	5.44	5.03
<b>SEm±</b>		<b>0.18</b>			
<b>CD at 5%</b>		<b>0.54</b>			
<b>CV%</b>		<b>6.82</b>			

**Table 7. Plant height (m) (Brinjal Round - AVT- I)**

<b>Plant height (m)</b>					
<b>Sr. No.</b>	<b>Entries/Genotype</b>	<b>RI</b>	<b>RII</b>	<b>RIII</b>	<b>Mean</b>
1	2023/BRRVAR-1	0.85	0.92	0.74	0.84
2	2023/BRRVAR-2	0.88	0.95	1.10	0.98
3	2023/BRRVAR-3	0.75	0.88	0.69	0.77
4	2023/BRRVAR-4	0.78	0.67	0.72	0.72
5	2023/BRRVAR-5	0.70	0.84	0.77	0.77
6	2023/BRRVAR-7	0.66	0.82	0.73	0.74
7	2023/BRRVAR-8	0.71	0.81	1.05	0.86
8	2023/BRRVAR -9	0.92	0.77	0.80	0.83
9	2023/BRRVAR-10	0.72	0.70	0.59	0.67
10	2023/BRRVAR-11	0.71	0.66	0.77	0.71
11	2023/BRRVAR-12	0.88	0.77	0.95	0.87
<b>SEm±</b>		<b>0.06</b>			
<b>CD at 5%</b>		<b>0.17</b>			
<b>CV%</b>		<b>12.23</b>			

**Table 8. Ancillary observation.**

<b>Sr. No.</b>	<b>Entries/Genotype</b>	<b>Fruit Colour</b>	<b>Calayx Colour</b>	<b>FW</b>	<b>BW</b>	<b>Nematode</b>
1	2023/BRRVAR-1	Black	Light green	Tolerant	Tolerant	Tolerant
2	2023/BRRVAR-2	Light purple	Light green	Tolerant	Tolerant	Tolerant
3	2023/BRRVAR-3	Light green	Light green	Tolerant	Tolerant	Tolerant
4	2023/BRRVAR-4	Light purple	Light green	Tolerant	Tolerant	Tolerant
5	2023/BRRVAR-5	Purple green	Purple white	Tolerant	Tolerant	Tolerant
6	2023/BRRVAR-7	Light green	Purple	Tolerant	Tolerant	Tolerant
7	2023/BRRVAR-8	White	Light green	Tolerant	Tolerant	Tolerant
8	2023/BRRVAR -9	Light green	Purple	Tolerant	Tolerant	Tolerant
9	2023/BRRVAR-10	Purple	Purple	Tolerant	Tolerant	Tolerant
10	2023/BRRVAR-11	Purple	Light green	Tolerant	Tolerant	Tolerant
11	2023/BRRVAR-12	Purple	Light green	Tolerant	Tolerant	Tolerant