

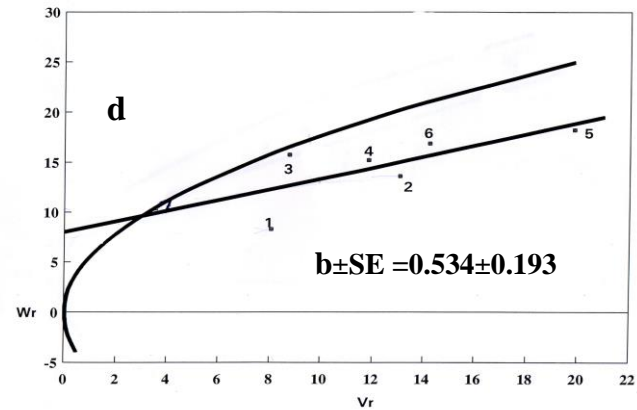
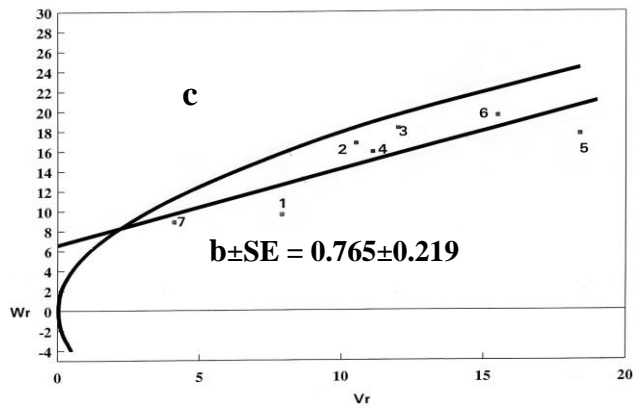
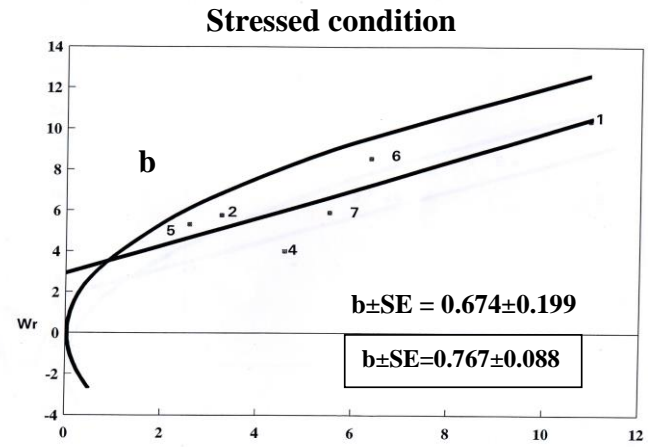
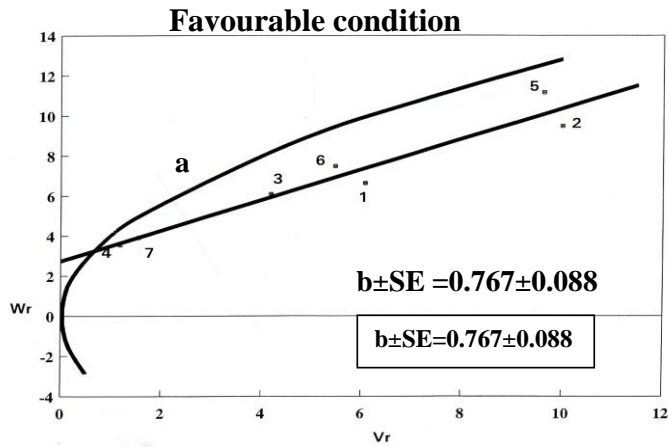
**Table (7):** Mean days to heading of the F<sub>2</sub> populations and the earliest selected F<sub>3</sub> families of the 21 crosses grown under favourable (F) and heat stressed(S) conditions and the response to selection .

Populati on	Favourable conditions				Heat stressed conditions				Mean Performance - - ( $x_1 + x_2$ )
	F <sub>2</sub>	F <sub>3</sub> ( $x_1$ )	%Response to selection from		F <sub>2</sub>	F <sub>3</sub> ( $x_2$ )	%Response to selection from		
			F <sub>2</sub>	Bp			F <sub>2</sub>	Bp	
P <sub>1</sub> x P <sub>2</sub>	76.33	72.67	-4.79**	-3.11**	74.00	68.33	-7.66**	-2.39 <sup>ns</sup>	70.50
P <sub>1</sub> x P <sub>3</sub>	76.67	75.33	-1.75 <sup>ns</sup>	3.19**	70.67	67.33	-4.73**	-2.42 <sup>ns</sup>	71.33
P <sub>1</sub> x P <sub>4</sub>	73.33	68.33	-6.82**	-5.97**	70.33	65.67	-6.63**	-7.51**	67.00
P <sub>1</sub> x P <sub>5</sub>	75.00	72.67	-3.11**	-9.54**	70.33	67.33	-4.27*	-9.83**	70.00
P <sub>1</sub> x P <sub>6</sub>	80.00	78.00	-2.50**	-2.90**	76.33	70.67	-7.42**	-5.36*	74.34
P <sub>1</sub> x P <sub>7</sub>	73.67	71.00	-3.62**	0.47 <sup>ns</sup>	68.67	64.33	-6.32**	-2.04 <sup>ns</sup>	67.67
P <sub>2</sub> x P <sub>3</sub>	72.67	69.67	-4.13**	-4.56**	68.67	63.67	-7.28**	-7.72**	66.34
P <sub>2</sub> x P <sub>4</sub>	73.33	68.67	-6.35**	-5.50**	68.33	63.67	-6.82**	-9.05**	66.17
P <sub>2</sub> x P <sub>5</sub>	77.00	75.67	-1.73 <sup>ns</sup>	0.92 <sup>ns</sup>	69.33	65.00	-6.25**	-7.14**	70.34
P <sub>2</sub> x P <sub>6</sub>	81.00	78.33	-3.30**	4.44**	77.33	72.33	-6.47**	3.33 <sup>ns</sup>	75.33
P <sub>2</sub> x P <sub>7</sub>	71.33	68.67	-3.73**	-2.83*	67.33	64.67	-3.95*	-1.53 <sup>ns</sup>	66.67
P <sub>3</sub> x P <sub>4</sub>	71.00	70.00	-1.41 <sup>ns</sup>	-3.67**	67.00	64.33	-3.99*	-6.76**	67.17
P <sub>3</sub> x P <sub>5</sub>	76.33	71.33	-6.55**	-2.29 <sup>ns</sup>	73.67	68.33	-7.25**	-0.97 <sup>ns</sup>	69.83
P <sub>3</sub> x P <sub>6</sub>	78.00	73.67	-5.55**	0.92 <sup>ns</sup>	73.67	70.00	-4.98**	1.45 <sup>ns</sup>	71.84
P <sub>3</sub> x P <sub>7</sub>	68.33	66.67	-2.43 <sup>ns</sup>	-5.66**	66.33	63.00	-5.02*	-4.07 <sup>ns</sup>	65.17
P <sub>4</sub> x P <sub>5</sub>	79.67	75.00	-5.86**	3.21**	77.00	71.67	-6.92**	0.94 <sup>ns</sup>	73.34
P <sub>4</sub> x P <sub>6</sub>	74.67	74.00	-0.90 <sup>ns</sup>	1.83 <sup>ns</sup>	70.33	64.67	-8.05**	-8.92**	69.34
P <sub>4</sub> x P <sub>7</sub>	69.00	67.33	-2.42 <sup>ns</sup>	-4.73**	67.00	65.33	-2.49 <sup>ns</sup>	-0.51 <sup>ns</sup>	66.33
P <sub>5</sub> x P <sub>6</sub>	82.33	75.67	-8.09**	-9.92**	78.33	73.00	-6.80**	-8.75**	74.34
P <sub>5</sub> x P <sub>7</sub>	72.00	69.00	-4.17**	-2.36 <sup>ns</sup>	70.00	64.00	-8.57**	-2.54 <sup>ns</sup>	66.50
P <sub>6</sub> x P <sub>7</sub>	73.33	71.67	-2.26 <sup>ns</sup>	1.42 <sup>ns</sup>	70.67	65.67	-7.08**	-0.01 <sup>ns</sup>	68.67
Mean	75.00	72.06	-	-	71.21	66.81	-	-	-

-,+ Signs refers to F<sub>3</sub> segregates earlier or later than the F<sub>2</sub> or the better parent, respectively .

\*,\*\* Significant at 0.05 and 0.01 probability levels, respectively .

Bp = better parent .



**Fig.(1):**  $W_r/V_r$  graph for days to heading during the 2004/2005 season ( a&b) and 2005/2006 season (c&d ), under favourable and heat stress conditions.