

Table 4 Selection function, expected genetic gain and relative efficiency (RE%) of different selection indices of brinjal

Selection Function	Expected Genetic Gain	Relative Efficiency Over Direct Selection
$I_1=b1x1$	1.31	100%
$I_2=b2x2$	1.22	93.20%
$I_3=b3x3$	2.19	166.79%
$I_4=b4x4$	1.28	97.55%
$I_5=b5x5$	0.48	36.38%
$I_{12}=b1x1+b2x2$	2.2	167.42%
$I_{13}=b1x1+b3x3$	3.04	231.89%
$I_{14}=b1x1+b4x4$	2.15	164.01%
$I_{15}=b1x1 +b5x5$	1.59	120.94%
$I_{23}=b2x2+b3x3$	2.13	162.25%
$I_{24}=b2x2+b4x4$	1.89	144.03%
$I_{25}=b2x2+b5x5$	1.37	104.15%
$I_{34}=b3x3+b4x4$	2.39	182.47%
$I_{35}=b3x3+b5x5$	2.36	180.00%
$I_{45}=b4x4+b5x5$	1.47	112.39%
$I_{123}=b1x1+b2x2+b3x3$	3.26	248.24%
$I_{124}=b1x1+b2x2+b4x4$	2.86	217.88%
$I_{125}=b1x1+b2x2+b5x5$	2.4	183.01%
$I_{134}=b1x1+b3x3+b4x4$	3.39	258.14%
$I_{135}=b1x1+b3x3+ b5x5$	3.26	248.31%
$I_{145}=b1x1+ b4x4+b5x5$	2.4	182.53%
$I_{234}=b1x1+ b4x4+b5x5$	2.43	185.32%
$I_{235}=b2x2+b3x3+ b5x5$	2.34	178.16%
$I_{245}=b2x2+ b4x4+b5x5$	2.06	157.15%
$I_{345}=b3x3+b4x4+b5x5$	2.61	199.17%
$I_{1234}=b1x1+b2x2+b3x3+b4x4$	3.64	277.54%
$I_{1235}=b1x1+b2x2+b3x3+ b5x5$	3.48	265.22%
$I_{1245}=b1x1+b2x2 +b4x4+b5x5$	3.07	233.94%
$I_{1345}=b1x1 +b3x3+b4x4+b5x5$	3.63	276.24%
$I_{2345}=b2x2+b3x3+b4x4+b5x5$	2.67	203.85%
$I_{12345}=b1x1+b2x2+b3x3+b4x4+b5x5$	3.88	295.87%

I_1 = yield/plant (g), I_2 = fresh weight/fruit (g), I_3 = no. of fruits in inflorescence/plant, I_4 = no. of fruits in solitary/plant, I_5 = no. of secondary branches/plant