

4. Study of vigor in F₂.

An F₂ derived from a cross between inbred line 38-11 (yellow starchy) and white sugary gave the following data on seed weights and seedling height (after 3 weeks growth in greenhouse). Height measurements are from soil line to tip of longest leaf.

Ear no. 1 segregating 9:3:3:1 ratio

Genotype	Average Wt. of Seeds	SE _M	Average Seedling height	SE _M
YY Su--	272.8 mgm	0.080 mgm	36.0 cm	0.50 cm
Yy Su--	276.4	0.074	36.7	0.41
Y--susu	231.8	0.075	34.3	0.6
yy Su--	272.8	0.136	37.2	0.64
yy susu	221.1	0.264	29.5	1.3

Ear no. 2 also segregating 9:3:3:1 ratio

Genotype	Average Wt. of Seeds	Average Seedling height	SE _M
Y-- Su--	286.3 mgm	41.9 cm	0.40 cm
Y-- susu	239.0	38.5	0.47
yySu--	252.4	37.8	0.63
yy susu	252.4	34.4	0.82

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