

2. A new gene suppressing the wrinkling due to su_1

A new gene which shows an almost imperceptible endosperm translucence when segregating in normal dent stocks was found to increase amylose content to approximately 60%. In crosses with su_1 , an F_2 segregation of 477 normal starchy: 164 wrinkled: 66 non wrinkled glassy which approaches a 12:3:1 ratio. The non wrinkled glassy kernels bred true. The wrinkled kernels either bred true or segregated in a ratio of 3 wrinkled: 1 glassy. It would appear that this new gene (tentatively called ha for high amylose) is suppressing the wrinkling normally associated with su_1 , the recessive $su_1 ha$ endosperms being glassy instead of wrinkled. Chemical analyses are in process.

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