suspected heterozygotes segregated into normal, intermediate, and mutant phenotypic classes. These classes did not deviate significantly from the expected 1:2:1 segregation ratio of a single factor. The 6 BC₁, families segregated intermediates and normals and the 6 BC₂, families segregated normals and intermediates. In both backcross populations the segregation did not deviate significantly from the expected 1:1 segregation of a single factor.

**Discussion and Summary**

The data presented for SJ, F₁, F₂, F₃, and BC₃ populations indicate that veins-fused is controlled by segregation at a single locus. When plants are homozygous for the mutant allele, the mutant phenotype is expressed, but when they are heterozygous for the mutant allele, an intermediate phenotype is produced.

In the material studied, all three levels of the mutant gene could be distinguished phenotypically. When veins-fused was crossed to a multiple-marker line for dominant genes, however, approximately half of the F₁ showed the intermediate mutant expression and the remainder were normal in appearance. In the F₂, expression of the intermediate phenotype was again incomplete, and the mutant had to be scored as a complete recessive.

Since the above results have established the monofactorial inheritance of a new mutant in cotton, it was desirable to assign the mutant character a genetic symbol. Corresponding to the proposed name veins-fused, the genetic symbol uf is proposed for the mutant character. The mutant genotype would be UtF⁻ and the normal genotype would be Vf Vf.

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**A SIMPLE METHOD OF HOT WATER EMASCULATION OF SORGHUM**


**BULK** emasculation of sorghum flowers with hot water was first reported in 1933 by Stephens and Quinby. The effectiveness of hot water as an agent for killing pollen was recognized by other plant breeders who have since employed various modifications of the methods suggested by Stephens and Quinby on several species of grasses.

One of the greatest disadvantages of hot water emasculation of sorghum has been the difficulty of constructing a suitable emasculation apparatus. An attempt was made at the University of Illinois in the summer of 1959 to develop

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