

BC₁I₁ segregates were outcrossed to lg₁ and lg₂ synthetics as a test for allelism. Progeny of the lg₂ outcross was all normal. Progeny of the lg₁ outcross all had extremely upright leaves and normal ligules. We propose the nomenclature for this new allele of lg₁ to be "lg₁^u", the "u" superscript designating "upright leaves." It is interesting to note that if lg₁^u had been the first allele to be described at this locus, it might have been named "ul" instead of "lg₁".

D. L. Shaver
Dennis Chamberlain

2. Tp fails to replace pe in the expression of perennialism in 2n maize.

Shaver (J. Hered. 58:271-273, 1967) showed that perennial 2n maize could be produced on the basis of a simple genetic change involving only the three genes id, gt, and pe. However, the evidence for the existence of pe as a single gene was only circumstantial. Upon attempting to transfer this locus to diploid maize singly, he succeeded only once in identifying a clear phenotype that could be ascribed to the presumed gene, when there was a clear segregation in the inbred line backgrounds, K55W and K64W, for the pe phenotype: Ear branches were replaced by a semi-vegetative branch, plants had a slightly slower growth rate, but later achieved a somewhat greater height. In following years, further evidence for pe was obtained in experiments wherein perennial plants were obtained only from crosses involving stocks having the presumed pe gene, with stocks having gt and id.

Dr. L. M. Josephson furnished a stock of "Potch Teopod" which, besides having the extreme tillering phenotype, has the ear on the main culm replaced by a semi-vegetative branch, similar to the once-observed effect of pe in K55 and K64. However, upon attempting to produce perennial diploids of the genetic constitution, gt/gt id/id tp/tp, none was found to be perennial.

D. L. Shaver