

The photosynthetic mutant *ppr10* is allelic to the luteus seedling mutant *l15*.

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The photosynthetic mutant *ppr10* (*pentatricopeptide repeat10*) conditions a luteus seedling phenotype, and the locus is located on the long arm of chromosome 6 (Pfalz, J; Bayraktar, OA; Barkan, A. 2009. EMBO J. 28:2042-2052). Other luteus seedling mutant loci (*l10*, *l12*, and *l15*) also map to the long arm of chromosome 6, but tests of allelism of *ppr10* with these loci have not been previously reported. The Maize Genome Database placement of *l15* seemed to be closest to the map position of *ppr10*, so we conducted a direct test of allelism of *ppr10* with *l15*. Plants heterozygous for *ppr10* in coupling with *y1* were crossed with plants heterozygous for *l15* in coupling with *y1*, and yellow and white kernels from the F1 ears were separated and planted in the sand bench. Seedlings grown from the yellow kernels were predominantly green, with a few luteus seedling crossovers, and seedlings grown from the white kernels were predominantly luteus, with a few green seedling crossovers. We conclude that *ppr10* is allelic to *l15*, and suggest that the locus name *l15* be retained due to its precedence in the literature (Robertson, DS. 1981. MNL 55:115). A *l15* stock was sent to the Barkan lab for analysis; Western blot analysis of *l15* seedlings with antibodies raised against PPR10 protein showed absence of PPR10 protein (Barkan lab, personal communication), providing further confirmation of *ppr10/l15* allelism.