to show complementation. All of these lemon endosperm mutants produce plants with green color.

There is good indication from the data available that EMS could be used to induce lemon endosperm mutants in material and the probability is high that the mutants would be at the same locus. These data are also of practical value since corn with lemon colored endosperm is valued in the human food industry.

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## 1. Inheritance of a new brachyism.

Four experiments with Tx61M (Texas stock) and T61 (Tenn. stock) on the inheritance of brachyism (above the ear) reveal that two pairs of genes differentiate the parents for this new character. Partial phenotypic dominance toward the T61 non-brachytic parent occurred in three out of four families.

A negative association with an r value of -.43 exists between the brachytic trait and plant height. The r value of .18 between brachyism and stalk diameter is much lower.

The lack of a significant correlation between ear height and brachyism may give the new brachytic an advantage over other brachytic genes in that a reduction in plant height is not accompanied by a reduction in ear height and yield.

J. G. Legg
A. A. Fleming

## 2. South American flints.

Flint corns from South America in 1971 averaged 74 bu./a in yield compared to 139 bu./a for U.S. dents and 98 bu./a for a flint-dent South American hybrid.

A. A. Fleming