

8. Ratio of + to mutant seedling types in F₂ of endosperm mutations produced by radiation of maize pollen.

In 1952 a large number of maize endosperm mutations were produced at Brookhaven National Laboratory. The mutagenic agents were chronic gamma radiation of corn tassels, and radiation of mature pollen with thermal neutrons and ultraviolet.

The endosperm mutants were grown in 1953 and selfed. The F₂ were grown this winter in the greenhouse and observed for seeding mutation. The ratio of + to mutant for the three mutagenic agents were as follows:

Mutagen	Progenies	Number of Mutants	3:1	Deficiency of Mutant	Excess of Mutant
Chronic gamma	496	45	38%	58%	4%
Thermal neutrons	136	14	36%	64%	
Ultraviolet	196	20	60%	40%	

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