

3. Longevity of yellow inbred lines.

Seventy-one inbred lines which were last grown in 1949 were stored at room temperature both as shelled and unshelled seed with the shelled and unshelled seed of each line stored in the same kraft paper bag. In January of 1955, the seed was planted in sand with 5 replications of 20 seeds each for both the shelled and unshelled seed. The seed was not previously treated with a fungicide. Germination percentages for the 71 lines tested indicated a very slight advantage for shelled seed (12.5%) compared with ear storage (11.2%). Two inbreds, C17 and W74, gave a higher germination for ear storage seed, whereas in most of the remaining group that germinated, the trend favored the seed stored as shelled grain. The number of inbreds grouped in the various germination classes are as follows:

Germination	
Range	Inbreds
%	No.
0	12
1-5	16
6-10	14
11-15	8
16-20	7
21-25	1
26-30	5
31-35	2
36-40	3
41-45	3
above 46	0
	<hr/>
	Total 71

The three inbred lines germinating above 40% were Mo. 567, R62, and W62. Anyone desiring detailed information on germination percentages for the remaining group may have it upon request.