mean performance and variability compare with the 'original' version of the variety we presently have in cold storage.

I have been able to recover 13 of the 16 lines from seed stocks at Iowa State University (Ia.I159, Ia.I224, Ia.Os420, Ia.WD456, Ill. Hy and CI187-2), Funk Brothers Seed Company (CI540, Ind.Tr9-1-1-6, A3G3-1-3 and Ill.12E), Pioneer Hi-Bred International, Inc. (LE23 and Ind.461-3) and Ohio Research and Development Center (Oh.3167B). In addition Mr. Baker of Pioneer Hi-Bred gave me seed of the parents (Fe and B2) of F1B1-1-7-1. I have not been successful in obtaining either seed for or information about Ind.AH83 and CI617-3-4. Dr. G. F. Sprague (personal communication) thought CI617-3-4 was a line developed by Dr. F. D. Richey from an Illinois variety; this is the extent of my information for Ind.AH83 and CI617-3-4.

If anyone can provide me with any information, suggestions or seed of Ind.AH83 and CI617-3-4, it would be appreciated. One or both of the lines may have been renumbered, or they may not have survived subsequent evaluation.

Arnel R. Hallauer

Differences in absorption of foliar-applied high molecular weight phosphate among corn inbreds with three different cytoplasms — The Texas male-sterile cytoplasm (cms-T) has been shown to absorb a foliar-applied high molecular weight phosphate (HMP) more than its isoline with normal cytoplasm. In a similar experiment with the S cytoplasmic male-sterile (cms-S) and the C cytoplasmic male-sterile (cms-C), it was found that cms-C is similar to cms-T in its absorption of the HMP; cms-S showed no difference in absorption when compared with its normal isoline. In none of the three comparisons of each of the cytoplasmic male-sterile lines with its normal isoline was there a difference in orthophosphate absorption, nor did any of the lines show a difference in the translocation of either source of phosphorus inside the plant ten days after application. These results show that the three known cytoplasms are not similar in the property of absorption of foliar-applied HMP. Further, differences were found among lines in the rates of absorption of foliar-applied phosphorus.

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Gametophytic factor (ga10) on chromosome 5 distal to A2 — Reciprocal crosses of an A2 Bt/a2 bt stock with a homozygous a2 bt tester revealed a deficiency of colored kernels when the heterozygous plants were used as males (Table 1) compared to the results of crosses when the same plants were used as females (Table 2).