parent. At present a survey of the Ga locus in all the teosinte races is underway.

The problem of detecting the effect of teosinte introgression in the maize of the region is also under study and several lines of investigation are being pursued. Seed ears and obviously introgressed ears from the study fields are being inbred to recover plants with more pronounced effects of teosinte introgression and homozygous chromosome segments from teosinte. Cytological studies of these plants have indicated a frequency of B chromosomes from 0-6. The number of B chromosomes appears to be higher (4^+) in those plants which exhibit pronounced introgressed morphology. A working hypothesis in these studies is that B chromosomes may act as sponges "absorbing or buffering" the extreme effects of homozygous teosinte introgression. Teosinte from these same fields exhibits 0-4 B chromosomes. Parallel with the investigation of the B chromosomes are cytological studies of the effects of homozygous knobs on the morphology of the inbred maize from these fields.

Further attempts to hybridize the clones of T. lanceolatum from the study area with both maize and teosinte are continuing.

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1. On the longevity of corn seed.

A collection of the sweet corn, "Chuspillo," made by Fr. Steinbach, Cochabamba, Bolivia and placed in cold storage at the Harvard Biological Lab. by P. C. Mangelsdorf in 1941 was found to germinate 100% in May 1970, almost 30 years after its harvest. This is believed to be the oldest corn seed ever found to be viable and it is hoped that this note will help to inspire the continued maintenance of cold storage collections.

The Chuspillo seed was stored in a small screw cap bottle under constant refrigeration below 40°F. It is part of a collection of about 1900 items from Latin America collected chiefly in the period from 1940 to 1950 and stored at Harvard University until June 1968 and since then at the University of Massachusetts in Waltham.

W. C. Galinat

2. The morphological nature of "string-cob" corn.

In my previous study of the inheritance of the string cob trait in which the cob has about the same diameter as the central spike of the tassel, segregation in one background revealed control by two incompletely dominant genes (Mass. Agric. Exper. Sta. Bull. 577). Correlations of condensation in the tassel and kernel row number with cob diameter indicated that one of the dominant factors was the normal allele to a recessive gene for fasciation.

In the present studies, the effects of this dominant allele involved in the string cob trait have been identified as also including narrow cupules. In the recessive condition, wide cupules become associated with fasciation or sometimes a branching of the cob when the requirements for cupule space cramped by high row numbers (via condensation and ramosa) require an increase in surface area.

The second component of the string cob trait is now recognized as one for reduced pedicels (foot stalks). The pedicel is that portion of the spikelet axis beneath the glumes and the rachilla is above the glumes. In a thick cob, an elongate pedicel is embedded in the floor of the cupule where it is commonly identified in error as the spikelet trace.

In the tassel, only one member of the pair of spikelets is usually pedicellate. In the thick cob of Corn Belt corn usually both members of the pair are pedicellate although pedicels are fused into the cupule floor. All combinations of pedicellate and sessile spikelets in the ear have been identified in variant forms.

The reduction of pedicels appears to involve the interaction of two complementary genes, thus increasing to three the number of genes