Table I. Frequency of dicentric bridges (B) and acentric fragments (F) at anaphases I and II of F_1 plants of maize and Jutiapa teosinte.

	Anaphase I						Anaphase II based on single Cell Counts	
	0 B 0 F	1 B 1 free F	0 B 1 free F	1 B 0 F	0 B 2 F's	1 B 1 attached F	0 B	1 B
Frequency	405	53	46	3	1	1	414	1
% of total	79.5	10.4	9.0	0.6	0.2	0.2	99.8	0.2

Y. C. Ting

14. Low temperature effects on chromosomes similar to those of X-rays.

In the winter of 1959, inflorescences of nine F_1 plants of Wilbur's flint x Jutiapa teosinte and its reciprocal cross were collected and fixed with aceto-alcohol fixative in Homestead, Florida. The time of fixation of these inflorescences was about one week after frost occurring on the 24th of January, which killed a part of the winter-grown maize plants. When microsporocytes of these inflorescences were investigated with standard squash technique, synizetic knob, ubiquitous univalents, mitotic chromosomes, chromatin aggregates, precocious division, elongated spindles and micronuclei were constantly observed. These irregularities are similar to those induced by x-rays. However, when the same materials were grown in Jamaica Plain, Mass., in the summer of 1960, the above abnormalities were rarely obtained with the same technique. It seems difficult to exclude a conclusion that these irregularities are probably induced by low temperature.

Y. C. Ting

15. Cross-sterility in Chalco teosinte.

Eleven Chalco teosinte plants grown from open-pollinated seeds were employed as seed parents and crossed with our standard inbred strain of Wilbur's flint. Only four seeds were produced. The total number of receptive silks involved was estimated at 785, which