

## Recovery of Chromosomal Deficiencies For The Isolation Of New Monosomics

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A maxim of cytology is that a chromosomally aberrant complement tends to produce other types of chromosomally aberrant complements. This applies particularly to the cytotypes monosomic 9, monotelodisomic 9S, monoisodisomic 9S, and monotelodisomic 20L.

The progeny of several plants that were aneuploids of various kinds were analyzed for the recovery of simple monosomics. It was the hope that some of the simple monosomics might involve chromosomes not presently identified in the monosomic series.

Listed in Table 2 are several of the aneuploid parental types, whose progeny were analyzed for the recovery of monosomics. Only those newly recovered cytotypes that are of interest to us are listed in the table. Seed from these new types, particularly M070-M073, will be planted in 1985 for further evaluation of their potential of being a new monosomic.

**Table 2. Chromosome Deficient Types Recovered from More Complex Aneuploid Forms**

Parental Cytotype	New Cytotypes Recovered	Frequency
A25-3-83 24" 1's t1"(T9S)	25" 1'vl (Mo73)	1
D4-2-83 22" 3' l1"(IS09S)	25" 1'vl	2
B7-6-83 23" 2'l t1"(T10L)	25" 1'l	1
B18-10-83 23" 3'(2l's) st1"(T20L)	25" 1's (Mo70)	4
	25" 1'l(H7?)	5
	24" 1" 1'ms	1
F3-10-83 23" 2'l st1"(T20L)	24" 1'l st1"	2
F4-20-83 24" 1'vl st1"(T20L)	25" 1'vl (Mo71)	1
AZ1010 Mo69v1	25" 1's (Mo72)	1
	25" 1'l(H7?)	4
	24" 2'l	1

*vl = very large, l = large, s = small, t = telocentric chromosomes*