

## LOCATION OF NEW TRANSLOCATION IN PISUM

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A study of 6-ray-induced chlorophyll mutant lines produced from the 'Capital' variety (normal structural type of chromosomes) revealed a reciprocal translocation in one of the lines (chlorina-mutant line No. 4). Karyotype analysis indicated participation in the interchange of chromosome 3 and one of the metacentric chromosomes (1 or 2) (Fig. 1). Studies of F1 hybrids produced by crossing line No. 4 x line 21 T(1-7) and line No. 4 x line 83 T(3-5) showed the presence of hexavalents and four bivalents in the cells of the first meiotic metaphase (Fig. 2). This confirmed the participation of chromosomes 1 and 3 in the interchange.

The translocation T(1-3) found in line No. 4 and a chlorina-mutation from this same line, tentatively localized in chromosome 7, are apparently non-connected mutational events induced simultaneously in initial cells of the M1 seed following 6-irradiation.

Homozygous translocation T(1-3) was selected out in a pure line. The plants of the T(1-3) line were not dissimilar phenotypically from the plants of the initial variety.

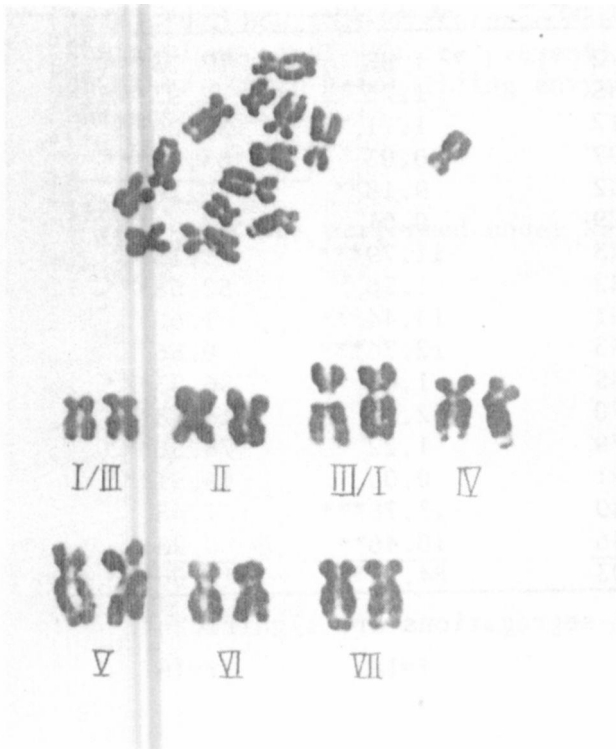


Fig. 1. Karyotype of plants from line No. 4 with homozygous translocation.



Fig. 2. First meiotic metaphase in the F1 hybrids (line 4 x line 21 T(1-7)).