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### Chromosomal translocation at the terminal end of 2L in *Drosophila malerkotliana*.

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All sorts of structural changes like deletions, duplications, inversions, and translocations in the polytene chromosomes of *Drosophila* can be clearly observed and are reported time to time in its different species. Paracentric inversions are very common in *Drosophila* and occur at a high frequency in a number of species of this genus. However, chromosomal translocations are very rarely reported as they confer deleterious effect. *Drosophila malerkotliana* belongs to the *bipectinata* species complex of the *ananassae* subgroup of the *melanogaster* species group (Bock, 1971). Chromosomal polymorphism in this species has substantially been investigated (Bock, 1971; Jha and Rahman, 1972; Naseerulla and Hegde, 1993). These workers have reported the occurrence of paracentric inversions in the different autosomal chromosomes of this species. As far as we know, any case of translocation has not been reported in *D. malerkotliana* so far.



Fig.1.A

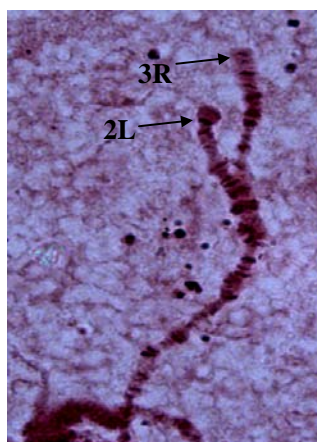


Fig.1. B



Fig.1. C

In this note, we are describing the presence of a chromosomal translocation in the left arm of second chromosome (2L) of *D. malerkotliana* in a isofemale line collected from Bilaspur (Madhya Pradesh, India) in July 2015. Perusal of banding pattern clearly reveals that a part of terminal end of 3R is attached with 2L resulting into the forked appearance of approximately 20% part of terminal end of 2L. Figure 1A shows the normal chromosome arms, whereas Figures 1B and 1C depict the translocation in 2L (translocation heterozygote). In fact, the forked appearance at the tip of 2L is due to pairing between a normal chromosome arm of 2L and a 2L chromosome arm with translocated terminal portion of 3R.

References: Bock, I.R., 1971, Chromosoma 34: 206-209; Jha, A.P., and S.M.Z. Rahman 1972, Chromosoma 37: 445-454; Naseerulla, M.K., and S.N. Hegde 1993, Dros. Inf. Serv. 72: 158-159.

Figure 1. A (top), B and C (bottom).