points are located in 17A-24F (chromosome map by Rajeshwari, 1971). Other two inversions (Fig. 2 and 3) named here as 2Ra and 2Rb are both found in the right arm of the second chromosome. The break points of 2Ra are located in 43D-47E and that of 2Rb in 45C-49C.

The translocation (Fig. 4) reported here is different from the ones reported earlier and is found in the Chitradurga population. It is a reciprocal heterozygous translocation involving the left arm of the second chromosome and the distal portion of the left arm of the third chromosome. One break has occurred in 20B of 2L and the other in 55D of 3L. It is worth noting that this translocation is associated with the inversion 2LA. In this respect it resembles the translocation reported in this DIS by Sreerama Reddy and Krishnamurthy. As this translocation is the tenth one for D. ananassae, it has been named as (2L-3L)10. The occurrence of these local and rare gene arrangements in such low frequency (1 or 2%) in natural populations of this species reflects the flexibility of its chromosome garniture.

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References: Rajeshwari, P. 1971 Doctoral thesis.

Mostashfi, P. and G. Koliantz.
University of Tehran, Tehran, Iran.

Genetic studies of D. melanogaster in Azarbaidjan.

In the summer of 1970, fruit flies (D. melanogaster) were collected from Tabriz City, the centre of East Azarbaidjan Province, and their genetics were studied. The collected females laid eggs under laboratory conditions and F_2 individuals were obtained by $F_1 \times F_1$ crosses, divided into seven lines. In each of the lines 1, 5, 6 and 7, no significant mutations were observed; therefore the ancestors of the seventh line, which was started with one pair of parents were subcultured (as endemic wild type) and kept for 10 generations under individual selection and from the eleventh generation they have been handled by mass culture. The wild type (also called wild-type Gayaneh) has a life cycle of 252 hours and 11 3/4 weeks of longevity.

Mutation No. 1: In the fourth line, some of the flies were distinguishable due to their pale pinky eye colour. The earlier crosses between ♀♀ mut/mut x mut/mut♂♂ and ♀♀ mut/mut x +/+ ♂♂ showed a female sterility, that is, the homozygous females produced eggs which did not hatch. Heterozygous females were normal. Further investigations proved the existence of a sterility factor in the third chromosome, at the distance of 108.6 ± 2. To maintain the mutant stock, a balanced method, derivated from G1 Sb/LVM, was used (Table 1).

Table 1

Females	Males	F1 Individuals	LVM/mut
G1 Sb/LVM	mut/mut*	G1 Sb/mut	1 LVM/LVM**
		LVM/mut	2 LVM/mut
			1 mut/mut

* mutant ** lethal

However, the mutation is one of the "fs" series in the third chromosome which has been associated with an eye color phenotype. The balanced stock is available and is called fs(3)T (female sterile of Tabriz). Homozygote females have 51 days of longevity and hybrid LVM/fs flies have 264 hours of life cycle.

Mutation No. 2: In the second and third lines, some flies showed a pentagon-like dark area on their mesonotum, associated with second and third chromosomes abnormalities. The mutation has an allelic cross with the "crown", found in 1967 from Tehran (see the papers of ISG). The mutant stock has a life cycle of 240 hours and 9 1/3 weeks of longevity, and was called "Crown of Tabriz". The latter and two former mutations are available.

All of the experiments were kept at 23 ± 0.5°C under constant white light on Mostashfi culture medium.

Reference: Mostashfi, P. and G. Koliantz, 1970, New mutations in Iranian natural populations of D. melanogaster, Second Cong. Iran. Soc. Gen. pp. 63 (in Persian).