

has revealed properties that make it a useful mutant for further investigations in the field of *Drosophila* immunity.

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New data on distribution of *Drosophila mercatorum* in inner regions of Eurasia.

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In Russia *Drosophila* (*Drosophila*) *mercatorum* Patterson et Wheeler, 1942 was first found in Novosibirsk city (Western Siberia) in 1990 (Ivannikov and Zakharov, 1994). Over the recent decade it has been found everywhere in the outskirts and the city of Novosibirsk. Since mid-1990s and until now, *Drosophila mercatorum* has been the most widely represented among synantropic *Drosophila* in Novosibirsk, which considerably outnumbered the other attendant species (*D. busckii*, *D. funebris*, *D. immigrans*, and *D. melanogaster*).

Novosibirsk city is situated in the geographical center of Russia - a country with vast territory covering most of the northern regions of the Eurasian continent. An assumption seems quite logical that occurrence of *D. mercatorum* in that area is not restricted to a single locality and the following facts testify to that. First, predominance of *D. mercatorum* over the other *Drosophila* species is evidence that, being a synantropic species, it can perfectly adapt to the conditions of continental Asia. Second, over the period from 1990 until now we have found the single individuals of *D. mercatorum* in inner areas of the continent - in Europe (Uman City, Ukraine, 1990) and Central Asia (Dushanbe, Tajikistan, 1994) (Ivannikov and Zakharov, 1995). However logical and valid the assumption about a wider occurrence of *D. mercatorum* in inner regions of Eurasia could be, until recently there has

been no evidence to that hypothesis. Our search for *D. mercatorum* in large settlements of Western Siberia to the south of Novosibirsk had not yielded any positive result until 1999. *D. mercatorum* species had not been found by other researchers in Eastern Siberia and Russian Far East despite their keen and extensive surveys of Drosophilidae fauna there (Toda, *et al.*, 1996). Our collections of synantropic *Drosophila* in Eastern Europe (including Russia) over the period of 1991-1999 also did not contain *D. mercatorum* specimens.

The situation began to change in 1998 when Dr. Yu. Novikov sent us a collection of synantropic *Drosophila* from Tomsk city, 200 km north of Novosibirsk. That collection contained two species - *D. mercatorum* and *D. busckii*. In summer and fall of 1999 *D. mercatorum* was also found in two more places - in the Chermal area of Altai Republic, 500 km south of Novosibirsk and among *Drosophila* collected by undergraduate K. Gunbin in Udmurt Republic in European part of Russia, 2000 km west of Novosibirsk. Therefore, two facts regarding the occurrence of *D. mercatorum* in Russia as well as in inner regions of Eurasia can be established at present: first, an occurrence of this species in the European part of Russia and, second, a spreading trend of this species in the Asian part of Russia.

The above-stated facts can make one form an opinion that into every region where we found *D. mercatorum* in 1998 and 1999 it migrated from the Novosibirsk population. To a certain extent that can be true as far as Siberian populations are concerned, but it is rather unlikely for the populations of Eastern Europe.

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An interesting fly from Siberia, similar to *Drosophila hydei* but not that one.

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In February 2000 I was studying the collections obtained during my field work in Altai Republic (southern part of Western Siberia) in 1999. Among the Drosophilidae collected in village Askat, Chermal area in August-September 1999, I found 10 flies (4 females and 6 males) of a species previously unknown to me. These flies in my collection were labelled as D.sp.99-19-01(IvAn). Judging by the external morphology of male genitalia, the unknown species is close to the species of the *repleta* group, but the coloration of integuments of the unknown species is very much different from those of the familiar synantropic species of the *repleta* group ever found in the former USSR. I compared D.sp.99-19-01(IvAn) flies with *D. hydei* flies of the strain maintained in the lab of Professor I. Zhimulev as well as with *D. mercatorum* from the Siberian populations. This comparison showed that the unknown flies were very similar to *D. hydei* species but differed from it in several important characters.

The similar and differing characters are as follows: morphological analysis of male genitalia showed that penis of D.sp.99-19-01(IvAn) is almost identical in shape to that of *D. hydei*. Although all chitinous structures of male genitalia of D.sp.99-19-01(IvAn) are slightly bigger in size than those of *D. hydei*, the shape of the penis is virtually the same. At least, as far as the shape of the penis is