Abstract

The contact zone between subspecies of house mouse *Mus musculus musculus* and *Mus musculus domesticus* is one of the most intensively studied hybrid zones. It is also due to extensive introgression of the Y chromosome of *M. m. musculus* subspecies to the genetic background of *M. m. domesticus*. One theory of the origin of the introgression explains it by intragenomic conflict between the sexes. With a set of variable microsatellite markers on the Y chromosome, I have examined the validity of this theory by simple approaches revealing the history of the introgression area. It turned out that overly big variability of our markers makes the revelation of this theory impossible. Our markers have been found suitable for use in the analysis of population structure of house mouse. Thanks to them, we can identify migrants between localities and estimate the level of closeness of the population structure in relation to migrants from the neighborhood. Populations in our analysis proved to be relatively closed and resistant to the influx of migrants. Despite the conclusions of previous research where the dispersion of males ran up to one kilometer, I have discovered a relatively large number of migrations to a distance of thirty kilometers.

Keywords

Mus musculus musculus, *Mus musculus domesticus*, Y chromosome, introgression of the Y chromosome, population structure, migration, hybrid zone