Ecological and population peculiarity, interspecific relations of the Lacertid lizards *Zootoca vivipara* and *Lacerta agilis* in sympatry zone

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Within their vast natural habitat, Southern Siberia including, *Zootoca vivipara* and *Lacerta agilis* are represented by allopatric and sympatric populations. The investigation was carried out through May till September in 2002-2004 in various landscape areas of the south-east of Southern Siberia, as well as on two experimental grounds (Tomsk surroundings). The following characteristics were taken: specific (ecological) and average density, sex and age structures, dimensions of the particular areas and type of spatial distribution, degree of ecological niche segregation.
In various landscape areas of the South-East of Southern Siberia *L. agilis* can be found mostly in open biotopes (optimal in steppe - forest-steppe areas), while *Z. vivipara* prefers more covered biotopes (optimal in forest areas).
In various microhabitats of experimental grounds there could be marked seasonal and annual variations of lizards' population density. On every microhabitat of the experimental ground the sand lizard's population density had a trend to declining, while the viviparous lizard populations were increasing, that is the habitual conditions for the second species are close to the optimum.
The sand lizard's population was dominated by females, sex ratio 3 to 1, whereas the sex ratio of the viviparous lizard is close to 1 to 1. The spatial distribution of the *Z. vivipara* is aggressive (♂/♀>1). The size of a personal field of males is 1.3 times bigger than that of females. The spatial structure of the *L. agilis* has a diffusive nature (♂/♀=1). The dimensions of an adult and semi-adult males' personal field is 1.5 times bigger than that of the same age females. The divergence of species on the spatial range is caused by changes of the territorial organization and differences of shelters they prefer. There was a strong correlation of a prolificacy and body's length of females of both species. In an active period the width of the temporal component of the viviparous lizard's ecological niche is two times greater than that of the sand lizard. The trophical ranges of sympatriants are of the same quantitative composition, but are of different qualitative composition. Jaws' size of adult and semi-adult individuals of *L. agilis* is 2-3 times bigger than that of *Z. vivipara*.
That is why there are seasonal and annual differences in the population's density, sex and age structure, and special structure of *L. agilis* and *Z. vivipara*. The specious differences in the territoriality and settlement rate, biotope conditions requirements, reproduction strategies, and places of localization of the current year youngs allow sympatriants to coexist at the same territory.
Lizards with leg anomalies (extra – and polydactyly) are found in researched territory. External morphological anomalies can be caused by various toxic substances. In particular, in a zone near the Siberian chemical combine such anomalies are marked by us at amphibians. In organs and tissues of these animals high concentration of toxic elements are fixed (Kuranova, Baranovskaya, 2003).

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