

# MORPHOLOGICAL DIVERSITY OF SPERM AMONG ANURAN AMPHIBIANS

## Summary

Comparison of the sperm structure in individual groups of Anurans shows that spermatozoa are very various. In all amphibian species sperm have an acrosome. An axial perforatorium located in the endonuclear channel is present in spermatozoa of basal anuran families. A conical perforatorium surrounds the front part of the nucleus. This structure has been secondarily lost in some anurans. There is a fossa in the basal end of the nucleus, in which the centriola is placed. Movement organ (tail) is usually composed of the axoneme and the axial fiber. Sperm provided with two flagella have developed independently about 7 times during the evolution of Anura.

Analysis of the above considerations indicates three main trends in the evolution of Anuran sperm where can be distinguished: 1) modification of perforatorium, involving the reduction of axial perforatorium, conical perforatorium development or loss of both of these structures; 2) modification of the basal part of the nucleus by reduction of fossa, or development of a second fossa; 3) modification of the tail due to the disappearance of the axial fiber, undulating membrane or development of additional axoneme. Comparing the structure of Anuran spermatozoa it can be concluded that the comparative spermatology does not provide evidence for affinities of individual animal groups.