

Abstract

Vocalization allows mammals to communicate with other individuals of the same species and provide them with information about the dangers, the sex of the caller, but mainly species affiliation. Individual species with their vocalizations differ from one another, and therefore their vocal performance should be part of the prezygotic reproductive isolation barrier. Correct recognition of the sexual partner of the same species prevents creating a hybrid individual that may even be nonviable.

In the wild, hybridization between related species occurs more often than preassumed. It is considered that influence on the interspecific crossing can be caused by vocalization of hybridizing species. The role of vocalization in hybridization was studied on a few mammalian species. This review deals with the question, whether the mammal vocalization is a strong ethological reproductive isolation barrier and whether hybridization influences vocalization. It is known that some mammal species can reproduce sounds learned by listening, assuming that mammals are able to learn foreign sounds and that vocalization is based on listening rather than heredity. However, some studies suggest that mammalian vocalization is determined genetically. Hybrid individuals are ideal object for studying the inheritance of vocalizations, because of their variable parental species vocalizations, which allows vocalization either as one of their parents or a mixture of both. On the basis of their vocalization it is possible to distinguish to what extent they are genetically conditioned or influenced by teaching.