Abstract

Hybrid sterility is one of the mechanisms of intrinsic postzygotic reproduction barriers between species and plays a key role in the process of speciation, which is emergence of new species. In accordance with Haldane's rule, hybrid sterility affects preferably the heterogametic sex, which means that in organisms with XY chromosomes, such as mammals or drosophila, male sterility will be affected by sterility of hybrid offspring, while organisms with ZW chromosomes such as birds or butterflies, will be a sterile hybrid female. Symptoms and mechanisms of hybrid sterility are well studied in organisms with heterogametic males, whereas far fewer studies have been performed on organisms with heterogamous females. In my bachelor thesis I will introduce the basic theories explaining the two general rules of speculation, the Haldane rule and the associated great influence of chromosome X or Z on the occurrence of hybrid sterility. Furthermore, in my work I will deal with the manifestations of hybrid sterility of females in birds and in the selected species will introduce the mechanisms that cause this sterility.

Key words: Haldane´s rule, hybrid sterility, speciation, birds, postzygotic izolation