Abstract

Spiders represent a highly diversified group. In terms of their dispersal capability, they can be classified in two categories: vagile and sedentary. Vagile spiders, most of the Araneomorphae infraorder lineages, are better adapted for dispersal thanks to their ballooning capability and generally more active lifestyle compared to the sedentary spiders, mostly belonging to the infraorders Mygalomorphae and Liphistiomorphae. The manner of dispersal and its efficacy represents a key factor for the colonization of new habitats and maintaining gene flow among the populations of the same species. Limited dispersal capability is responsible for the tendencies to local endemism in sedentary groups. This thesis aims to summarize our knowledge about the dispersal capabilities of sedentary spiders and the effect of vicariance and allopatric speciation on their distribution. The thesis provides a brief overview of dispersal barriers and evaluates their effect on the gene flow among the populations. The data proceeding from studies focused on selected sedentary spider lineages suggest that dispersal barriers have a strong negative effect on gene flow among their populations. Limited gene flow thus leads to genetic diversification and subsequent speciation.

Key word: Dispersal, dispersal barriers, endemicity, sedentary spiders, vicariance