Abstract

Animal fly ability is undoubtedly one of the biggest innovation in evolution that allow animals to settle down another space on the Earth – the air. However, there are significant impacts on the other organisms during the evolution, too. The insect is single group of invertebrates with abilities to fly and because of that it became the most diversified group of organisms. There are a couple of theories about origin of the insect wings. Two major hypotheses considering the recent insects with their fossil record are widely known. Nevertheless, there is no direct clue to the first Pterygota due to the discontinuity of fossil record in the initial phase of their evolution

The wing is very complex and unique structure throughout organisms. Insects became very good fliers during the evolution and wings are also used to protect of the body, carrying sensory organs, etc. Nevertheless, only very few insect species are well explored in term of flight and, an open theme for future studies. Aim of the present work is to describe the significance of the wing and to briefly review its morphological and design properties.

Key words: Insecta, Pterygota, wing, venation, morphology, flight, evolution.