

Abstract

The Chalcidoidea superfamily is one of the most diverse groups of parasitic insects. The life strategy prevalent in most species of this superfamily is parasitoidism, which can be used by human as an effective tool in biological control. Parasitoids deal during their reproduction with the fact, that their hosts are often hidden in hardly accessible places. This matter of fact is probably the reason for development of some of the ovipositor's characteristics, that cannot be explained phylogenetically. These characteristics are therefore described as adaptations for parasitoid lifestyle. These adaptations mirror the nature of substrate which their hosts inhabitate and where the oviposition is being realised. Species inhabiting the same niche use to show different adaptations of the ovipositor, which could be explained by better distribution of the present resources. It is also considered a speciation factor of sympatric species. Detailed studies of the differences between ovipositor adaptations may simplify the determination process of life strategies of hymenopteran insects, which could be performed based on ovipositor morphology.

Key words: parasitic Hymenoptera, Chalcidoidea, ovipositor structure, hosts seeking, adaptation for host utilization, host discrimination