Abstract

The genus *Torymus* (Chalcidoidea: Torymidae) has very diversified parasitic strategies and adaptations to its hosts. Its larvae are ectoparasitoids and attack mostly larvae of various gall wasps (Hymenoptera: Cynipidae) and gall midges (Diptera: Cecidomyiidae). However, few species prefer also other insect groups as a host or are even phytophagous. Many hypotheses concerning evolution of insect host associations were published, but have not been satisfactorily tested using parasitic insects as a model. In this thesis I studied coevolution of the genus *Torymus* and its hosts. The main questions are what kind of host shifts occurred during the evolution of host strategies and whether sister species of parasitoids are specific to the related hosts/or nonrelated hosts living in the same type of habitat. I also studied changes at morphological adaptations to its hosts. To test critically these hypotheses, I constructed phylogenetic tree of selected *Torymus* species based on 5 genes and compared their host association within and between clades of *Torymus*.

Key words: Torymus, Chalcidoide, parasitoid, phylogeny, host specialisation