Abstract

All birds are infected by at least one type of ectoparasites. Despite high diversity of ectoparasites species in birds and other organisms, just some of them are introduced till now. In this study the passeriformes' ectoparasites were examined in Khorassan provinces regions (Razavi, Northern and Southern).

A total of 106 specimens from 11 different localities in these three provinces have been studied. Lice that have been extracted from our specimens, were belonged to three Families: Ricinidae (with Genus *Ricinus*), Menoponidae (included genera *Myrsidea* and *Menachantus*), and Philopteridae (included genera *Brueelia*, *Philopterus*, *Campnulotes* and Sturinodecus). Also bird specimens' mites were belonged to six Families: Trombiculidae (included genera *Ericotrombidium* and *Neochoengastia*), Macronyssidae (with Genus *Ornithonyssus*), and Epidermoptidae (with Genus *Promyialges*), Proctophyllodidae (included genera *Proctophyllodes* and *Dolichodectes*), Analgidae (with Genus *Strelkoviacarus*) and finally Dermanyssidae (with Genus *Dermanyssus*). In this study for examination the rate of cospeciation of parasites and their hosts, we used data of COXI gene of lice Genus *Myrsidea* and its host (Passeriformes).

Results of PAUP and TreeMap 3.0 analyses showed that the relationship between host-parasite tree was significant and nine common speciation events was identified in the comparison tree.

Key words: Phthiraptera, Passeriformes, Mites, Coevolution