

Abstract

Faunistic survey of the mites associated with ants and termites in Sistan region was conducted from 2017-2018. The ant and termite specimens were collected directly from their nests and were preserved in vials with 96% ethanol and some colony materials along with the ants or termites are also transferred to plastic bags. In the laboratory using from the berlese funnel, the mites in the nest soil were separated. Thereafter, insect alcohol sediments were examined for the presence of mites under a stereoscopic microscope. The mite specimens were cleared in lactoNessbitt's solution and mounted in Hoyer's medium. The morphology of mites was studied using a microscope. In this study, 20 specimens from 8 families and 14 genus were identified, Among identified specimens species *Laelaspis latisetus* sp.nov. is new for the world, Which is shown with a star. The list of species is as follows:

Lealapidae: *Haemolaelaps shealsi* (Costa, 1968); *Androlaelaps aegypticus* Hafez Elbadry and Naser, 1982; *Cosmolaelaps malmiriensis* Nemati and Gwiazdowicz, 2015; *Cosmolaelaps vacua* (Michael, 1891); *Myrmozercon cyrusi* Ghafarian and Joharchi, 2013; *Myrmozercon hunteri* Joharchi *et al.*, 2015; *Euandrolaelaps karawaiewi* Berlese, 1903; *Laelaspis dariusi* Joharchi *et al.*, 2012; *Laelaspis latisetus* **sp. nov.***; *Laelaspis mossadeghi* Babaeian and Joharchi, 2013; *Gaeolaelaps jondishapouri* Nemati and Kavianpour, 2013. **Ameroseiidae:** *Ameroseius delicatus* Berlese, 1918. **Melicharidae:** *Proctolaelaps pygmeus*, maller, 1859. **Caraboacridae:** *Caraboacarus krczali* Eidelberg, 1994. **Scatacaridae:** *Heterodispus verrucosus*, Mahanku and Rohde, 1970. **Bdellidae:** *Spinibdella crenini* Baker and Balock, 1962. **Cunaxidae:** *Cunaxa capreolu* Berlese, 1889. **Acaridae:** *Tyrophagus perniciosus* Zachvatkin, 1941; *Tyrophagus similis* Volgin, 1949; *Forcellinia* sp. Oudemans, 1924.

Keywords: Acari, Formicidae, Sistan, Termitidae, Taxonomy.



University of Zabol

Graduate school

Faculty of Agriculture

Department of Plant Protection

The Thesis Submitted for the Degree of Master of Science

(In the field of Agricultural Entomology)

Faunistic survey on the mites associated with ants and termites in Sistan region

Supervisors

Dr. S. Ramroodi

Advisors

Dr. N. Saheb zadeh

Dr. O. Joharchi

By

S. Saravani rad

Janvieh 2018