

University Of Zabol Faculty of Agriculture Department of Plant Protection

The Thesis Submitted for The Degree of Ph.D (In The field of Agricultural Entomology)

Taxonomic study of terrestrial Parasitengona (Trombidiformes: Parasitengona) ectoparasite on arthropod in Sistan and Baluchestan

province

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Abstract

Terrestrial parasitengona mites are ectoparasites of arthropods in the larval stage and predators in the second instar and adult stages. During the years 2021 to 2024, samples were taken from different regions in Sistan and Baluchestan province to identify terrestrial parasitengona mites. Different methods were used to collect larvae, including: direct collection of the host, swept, Berles-Tollgren funnel, washing, pit traps, tubular traps, and light traps. Samples were prepared in a clear lactophenol solution and microscopic slides were prepared using Hoyer medium. In this study, 27 species belonging to 18 genera, 10 subfamilies, seven families and two superfamilies were identified. Among them, seven species are new to the world of science (marked with *), one subgenus and six species are new reports for Iran (marked with **) and one genus and two species are also new reports for Iran and palearectic (marked with ***).

Subcohort Eryhraeina: Superfamily Erythraeoidea Grandjean: Family Erythraeidae Robineau-Desvoidy: Subfamily Abrolophinae Witte, 1995: Abrolophus aitapensis** (Southcott, 1948); Abrolophus mirabelae** Haitlinger, 2007; Nagoricanella salehi** Kamran and Alatawi, 2015; Subfamily Callidosomatinae Southcott, 1957; Charletonia baluchestanica Tashakor and Hakimitabar, 2015; Momorangia Southcott, 1972, Momorangia sp. nov*. ; Subfamily Erythraeinae Southcott, 1957; Erythraeus (Erythraeus) uhadi** Kamran and Alatawi, 2014 ; Erythraeus (Zaracarus) longipedus Saboori and Nowzari, 2001, Lasioerythraeus saboorii Khanjani, Raisi and Izadi, 2011; Subfamily Leptinae Southcott, 1957; Subgenus Leptus (Amaroptus)** Haitlinger, 2000, Leptus (Amaroptus) saboorii* Haddadi and Noei, 2025; Leptus (Amaroptus) sp. nov.*; Subgenus Leptus (Leptus) Latreille, 1796: Leptus (Leptus) danelli*** Southcott, 1992, Leptus (Leptus) andae*** Haitlinger, 2003, Leptus (Leptus) lighti** Southcott, 1999, Leptus (Leptus) tridentatus Saboori, Hakimitabar and Khademi, 2018; Subcohort Trombidina, Superfamily Trombidoidea Leach, 1815, Family Microtrombidiidae Thor, 1935, Subfamily Eutrombidiinae Thor, Eutrombidium nov.*; *Hexathrombium* sp. nov.*; 1935. sp. Subfamily Microtrombidiinae Thor, 1935; Atractothrombium sp., Trichotrombidium muscarum (Riley, 1878); Family Microtrombidiidae incertae sedis: Empitrombium prasadi Saberi-Riseh and Saboori, 2020; Family Trombididae Leach, 1815, Subfamily Allothrombiinae Thor, 1935; Allothrombium ovatum** Zhang and Xin, 1992, Allothrombium pulvinum Ewing, 1917; Allothrombium triticium Zhang, 1995; Subfamily Trombidiinae Leach, 1815, Trombidium Fabricius, 1775; Trombidium southcotti Zhang and Saboori, 1996; Family Trombellidae Thor, 1935, Subfamily Trombellinae Thor, 1935: Nothrotrombidium Womersley, 1954, Nothrotrombidium birjandensis Noei, 2017; Family Neothrombiidae Feider, 1959, Birjandtrombella Noei, 2020, Birjandtrombella farniae Noei, 2020; Family Chyzeriidae Womersley, 1954, Subfamily Pteridopinae Southcott, 1987, Perumaropta*** Haitlinger, 1999, Perumaropta sibsuranensis Haddadi and Noei, 2025*; Pteridopus Newell and Vercammen-Grandjean, 1964, Pteridopus sp. nov.*.

Keywoords: Acari; Prostigmata; New record; Host; Southeast Iran.