



University of Zabol
Faculty of Agriculture
Department of Plant Protection

**The Thesis Submitted for the degree of Doctor of
Philosophy (Ph.D.)
(In the field of Agriculture Entomology)**

**Taxonomic study of Oribatid mites
(Acari: Sarcoptiformes) in Sistan and
Baluchestan province**

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June 2022

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Abstract

In order to study the fauna of Oribatid mites in Sistan and Baluchestan province, during 2017-2020, soil and leaf soil samples were collected and transferred to the Plant Protection Laboratory of the Faculty of Agriculture, University of Zabol. The Lactophenol became clear and microscopic slides were prepared in Hoyer's medium. In this study, a total of 23 species belonging to 20 genera from 15 families and 13 superfamilies were collected and identified for the first time from Sistan and Baluchestan province, of which 2 species, for the first time and 2 species for the second time, from the country Iran was reported and two new species were introduced to the world of science, marked with*, ** and ***, respectively:

Supercohort Palaeosomata Grandjean, 1969: Superfamily Palaeacaroida Grandjean, 1932: Family Ctenacaridae Grandjean, 1954: *Ctenacarus araneola* (Grandjean, 1932); Family Adelphacaridae Grandjean, 1954: *Aphelacarus acarinus acarinus* (Berlese, 1910); Supercohort Enarthronota Grandjean, 1947: Superfamily Brachychthonioidea Thor, 1934: Family Brachychthoniidae Thor, 1934: *Sellnickochthonius immaculatus (Forslund, 1942); *Verachthonius montanus** (Hammer, 1952); Superfamily Cosmochthonioidea Grandjean, 1947: Family Cosmochthoniidae Grandjean, 1947: *Cosmochthonius (Cosmochthonius) asiaticus* Gordeeva, 1980; *Cosmochthonius (C.) lanatus* (Michael, 1885); *Phyllozetes emmae* (Berlese, 1910); Family Haplochthoniidae Hammen, 1959: *Haplochthonius (Haplochthonius) longiapophysus**** Ordouni, Akrami and Ramroodi, 2021; *Haplochthonius (H.) chamela*** Mahunka and Mejía-Recamier, 1998; *Haplochthonius (H.) simplex* (Willmann, 1930); Superfamily Lohmannioidea Berlese, 1916: Family Lohmanniidae Berlese, 1916: *Cryptacarus promecus* Grandjean, 1950; *Thamnacarus smirnovi*** Bulanova-Zachvatkina, 1978; Supercohort Mixonomata Grandjean, 1969: Cohort Dichosomata Balogh and Mahunka, 1979; Superfamily Epilohmannioidea Oudemans, 1923: Family Epilohmanniidae Oudemans, 1923: *Epilohmannia (Epilohmannia) cylindrica cylindrica* (Berlese, 1904); Cohort Euptyctima Grandjean, 1967: Superfamily Euphthiracaroida Jacot, 1930: Family Euphthiracaridae Jacot, 1930: *Acrotritia ardua* (Koch, 1841); Superfamily Phthiracaroida Perty, 1841: Family Phthiracaridae Perty, 1841: *Atropacarus (Atropacarus) striculus* (Koch, 1835); Supercohort Holosomata Grandjean, 1960: Superfamily Crotonioidea Thorell, 1876: Family Nothridae Berlese, 1896: *Nothrus anauniensis* Canestrini and Fanzago, 1877; Cohort Brachypylina Hull, 1918: Subcohort Pycnonoticae Grandjean, 1954: Superfamily Gymnodamaeoida Grandjean, 1954: Family Gymnodamaeidae Grandjean, 1954: *Jacotella frondeus* (Kulijev, 1979); Superfamily Oppioidea Sellnick, 1937: Family Oppiidae Sellnick, 1937: Subfamily Oppiellinae Seniczak, 1975: *Oppiella (Oppiella) nova* (Oudemans, 1902); Superfamily Tectocephoidea Grandjean, 1954: Family Tectocephidae Grandjean, 1954: *Tectocephus velatus* (Michael, 1880); Subcohort Poronoticae Grandjean, 1954: Superfamily Oripodoidea Jacot, 1925: Family Scheloribatidae Grandjean, 1933: *Scheloribates (Scheloribates) fimbriatus* Thor, 1930; Superfamily Galumnoidea Jacot, 1925: Family Galumnidae Jacot, 1925: *Pergalumna sistanbaluchestanica**** Akrami, 2021; *Pilogalumna tenuiclava* (Berlese, 1908); *Galumna (Galumna) flabellifera flabellifera* Hammer, 1958**

Key words: Cryptostigmata, Oribatida, Fauna, Southeast, Iran