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New Records of Soil Acarina and Collembola in Riyadh Region

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A taxonomic list of soil mites and Collembola, extracted from soils of different vegetation covers in Riyadh region, is given. Among the identified specimens thirty-two mite species and three collembolan ones are reported to exist in Saudi Arabia for the first time.

Despite the important role which mites and Collembola play in the process of soil fertility, taxonomic studies of these animals in Saudi Arabia have received scant attention from zoologists.

Abu Yaman (1966) was the first to record eight species of prostigmatid mites in the soils under different types of vegetation, including orchards, vegetables, and field crops. Six more prostigmatid mite species were added by Beccari (1971), who also reported one species of Collembola (*Seminuthrus viridis* L.) known to exist in Hofuf and Dammam. Soliman and Al-Yousif (1979) enlisted a total of eighteen species of Prostigmata from the Riyadh region. Six phoretic mite species, belonging to the Parasitiformes, were reported by Samsinak (1979) to exist on the body of *Musca domestica*. Bader (1980) described a new species of water mites from Wadi Mutaiwiyah. The mite fauna of date-palm in the Eastern province was studied by Hammad *et al.* (1981), who recorded one mesostigmatid and four prostigmatid species. Recently, three new species of oribatid mites found in the Riyadh region were described by Bayoumi and Al-Khalifa (in preparation).

The present work is a contribution to our knowledge of the different groups of soil Acari and Collembola existing in Riyadh region.

Sampling Localities

1. Ridyadh City: Garden of Ministry of Education, soil under *Tamarix* trees. 13.IX.1981.
2. — *Ibid.*: *Ibid.*, under palm trees. 13.IX.1981.
3. — *Ibid.*: *Ibid.*, under *Acacia*. 13.IX.1981.
4. — *Ibid.*: *Ibid.*, under *Ficus nitida*. 13.IX.1981.
5. Al-Diriyah: Soil under *Tamarix*. 9.VI.1981.
6. — *Ibid.*: Soil under *Citrus*. 29.VI.1981.
7. — *Ibid.*: Litter of *Punica granata*. 29.VI.1981.
8. — *Ibid.*: Litter of *Ficus nitida*. 29.VI.1981.
9. Salbukh: Litter under *Tamarix*. 9.VI.1981.
10. Durma: Soil under *Ziziphus* sp. 29.VI.1981.
11. Al-Sahba: Soil planted with *Alfalfa*. 1.VI.1981.
12. Al-Kharj: Soil under *Tamarix* trees. 1.VI.1981.
13. — *Ibid.*: Soil under plam trees. 25.VI.1981.

Taxonomic List

In the following faunal list, the name of species followed by the number of locality, and the number of individuals in the sample is given between parentheses. Previously recorded species in Saudi Arabia are marked with asterisks.

A. Acarina

Astigmata

1. *Glycyphagus domesticus* (DeGeer)—2(1), 3(5), 13(2).
2. *Tyrophagus palmarum* (Oudemans)—1(7), 5(2).
3. *Schwiebia* sp.—2(3), 7(1), 12(5).

Prostigmata

- *1. *Raoiella indica* Hirst—1(5), 3(2).
- *2. *Cunaxa simplex* Ewing—2(1), 9(2), 11(1).
- *3. *Cunaxa capreolus* (Berlese)—1(2), 3(8).
- *4. *Acropsis sollers* Rohdendorf—2(3), 9(5).
- *5. *Spinibdella bifurcata* Atyeo—6(8), 8(2).
- *6. *Tydeus munsteri* Meyer & Ryke—5(3), 12(7), 13(1).
- *7. *Eutetranychus afrasiaticus* McGregor—4(2), 5(3), 9(5), 12(2).

Mesostigmata

1. *Macrocheles apacus* (Koch)—2(3), 5(11), 9(2), 11(7).
2. *Macrocheles subbadius* (Berlese)—7(2).
3. *Pergamasus longicornis* (Berlese)—3(2), 5(1).

Cryptostigmata

1. *Rhysotritia ardua* (Koch)—1(3), 7(2), 11(8).
- *2. *Heptacarus ornatus* Bayoumi and Al-Khalifa, in prep.—12(9).
3. *Haplacarus* sp.—5(2).
4. *Epilohmannia cylindrica cylindrica* (Berlese)—3(6), 4(12), 8(22), 11(27).
5. *Epilohmannia pallida aegyptica* Bayoumi and Mahunka—2(1), 3(2), 5(3), 8(7).
6. *Nothrus biciliatus* (Koch)—8(2).
7. *Microzetes auxiliaris* Grandjean—7(3).
8. *Tectocepheus velatus* (Michael)—3(6), 5(2), 6(13), 13(2).
9. *Striatoppia niliaca* (Popp)—6(12), 8(22).
- *10. *Oppia bifidus* Bayoumi and Al-Khalifa, in prep.—12(20), 6(1).
11. *Oppia clavipectinata* (Michael)—3(2), 7(4).
12. *Oppia foveolata* (Paoli)—1(2), 5(3), 11(6).
13. *Oppia mihelcici* Perez-Inogo—6(3), 12(1).
14. *Oppia varians* Wallwork—1(2).
15. *Oppiella nova* (Oudemans)—3(6), 5(2), 10(3).
16. *Oribatula tibialis* (Nicolet)—5(1), 12(1).
17. *Scheloribates laevigatus* (Koch)—1(7), 2(3), 4(6), 5(12), 11(32).
18. *Scheloribates fimbriatus africanus* Wallwork—5(2), 12(14).
19. *Scheloribates pallidulus* (Koch)—3(1), 12(4).
- *20. *Scheloribates saudicus* Bayoumi and Al-Khalifa, in prep.—8(6), 12(2).
21. *Scheloribates* sp.—3(1).
22. *Xylobates capucinus* (Berlese)—2(5), 7(3), 9(2).
23. *Rostrozetes foveolatus* Sellnick—4(2).
24. *Lamellobates hauseri aegypticus* Bayoumi—6(3).
25. *Paralamellobates ceylanicus* (Oudemans)—1(1), 7(6).
26. *Galumna flabellifera* Hammer—13(1).

B. Collembola

1. *Hypogastrura manubrialis* (Tullberg)—1(12), 4(26), 5(2).
2. *Hypogastrura armata* (Nicolet)—1(3), 2(34), 8(16).
3. *Tomocerus minor* (Lub.)—3(15), 9(2).
- *4. *Seminuthrus viridis* L.—7(25), 8(32).

5. *Entomobria* sp.—5(2), 7(13), 8(21), 12(6).
6. *Cyphoderus* sp.—1(7), 3(9), 12(25).

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تسجيلات جديدة لحلم التربة وذوات الذنب القافز في منطقة الرياض

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يشمل هذا البحث تسجيلات جديدة لحلم التربة (الاكاروسات) وذوات الذنب القافز (الكولمبولا) في عدة بيئات مختلفة في منطقة الرياض . وقد تم تسجيل اثنين وثلاثين نوعا من الحلم بالاضافة الى ثلاثة أنواع من ذوات الذنب القافز لأول مرة بالملكة .