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SUMMARY

Acari play an important role in the life of birds and humans. Ticks and mites transmit viruses, rickettsiae, fungi, bacteria and protozoa. In addition it cause and vectors several disease for man and birds such as (depluming itch, skin lesions, pruritic papules and Erysipelas). The present work carried out to study the incidence of Acari inhabiting birds, nests, skin and feces. The results obtained could be summarized as follows:

1. Incidence of mites associated with some birds in Egypt including nests, feces, feathers and skins of birds.
2. Identification and classification of collected mite species and constructing classification key include collected and identified mite and tick species.
3. Identification and classification of collected birds.
4. Morphological description of some new species collected with reference to the classification key.

Incidence:

Incidence of mites associated with birds including feathers, nests, skins and feces. A general survey covered the most Governorates of Egypt (Aswan, Qena, Sohag, Assuit, Minia, Fayoum, Beni Suief, Giza, Cairo, Behaira, Qaluobia, Menofia, Kafr Shiekh, and Banha) was conducted for two years (2005, 2006). Study the incidence of mites associated with the birds, their nests, feces and skins in Egypt.

The results indicated the occurrence of 257 species belonging to 118 genera and 50 families belonging to five suborders; Gamasida, Actinedida, Acaridida, Oribatida and Ixodida.

Suborder Gamasida was represented by 87 species belonged to 30 genera belonging to 11 families. This families were; Rhodacaridae Oudemans, Ascidae Oudemans, Ameroseiidae Evans, Dermanyssidae Kolenati, Macronyssidae Oudemans, Laelapidae Berlese, Phytoseiidae Berlese, Parasitidae Oudemans, Macrochelidae Vitzthum, Uropodidae Berles and Digamasellidae Evans

Suborder Actinedida was represented by 107 species belongs to 53 genera in 20 families. These families were; Eupodidae Koch, Rhagidiidae Oudemans, Bdellidae Duges, Cunaxidae Thor, Pyemotidae Oudemans, Acarophenaxidae cross, Pygmephoridae Cross, Sitroptidae Mahunka, Scutacaridae Oudemans, Syringophilidae Lavoipierre, Harpyrhynchidae, Cheyleyiellidae Volgin, Cheyletidae Leach, Raphignathidae Kramer, Stigmaeidae Oudemans, Caligonellidae Grandjean, Eupalopsellidae Willmann, Trombidiidae, Tydiidae Kramer and Tarsonemidae Kramer.

Suborder Acaridida was represented by 53 species belongs to 30 genera in 16 families. These families were; Pyroglyphidae Cunliffe, Chortoglyphidae Berlese, Alloptidae Gaud, Acaridae Ewing and Nisbitt, Avenzoariidae Oudemans, Dermoglyphidae Vitzthum, Epidermoptidae Trouesart, Syringobiidae Trouesart, Rectijanuidae, Analgidae Trouesart & Megnin, Xolagidae Dubinin, Proctophyllodidae Megnin & Trouesart, Pterolichidae Megnin & Trouesart, Falculiferidae, Suidasiidae, Glycyphagidae Berlese.

Suborder Oribatida was represented by 7 species belongs to 3 genera in 2 families. These families were; Oribatulidae Thor and Epiohmanniidae Oudemans.

Suborder Ixodida was represented by 3 species belonged to 2 genera belong to family Argasidae.

Morphological description of these species collected was made and taxonomical keys were given.

Nineteen new mite species and two first records of Acari were described and illustrated. These were:

Suborder Gamasida represented by nine new species as follow:

1. Family Digmasellidae represented by two new species these were; *Dendrolaelaps* n. sp.1 from Domestic fowl feces (*Gallus gallus domestica*), in Giza and *Dendrolaelaps* n. sp.2 from Ostrich feces (*Struthio camelus camelus*), in Giza.
2. Family Phytoseiidae represented by one new species *Neaseiulus* (*Paratyphlodromus*) n. sp. Mallard feces (*Anas platyrhynchos platyrhynchos*), in Bahaira.
3. Family Dermanyssidae represented by one new species *Dermanyssus* n. sp. from nest of House sparrow (*Passer domesticus niloticus*) in Sohag.
4. Family Macronyssidae represented by three new species these were; *Hirstionyssus* n. sp. from nest of House sparrow (*Passer domesticus niloticus*) in Cairo, *Steatonyssus* n. sp.1 from nest of Rock pigeon (*Columba livia domestica*) in Giza and *Steatonyssus* n. sp.2 nest of House sparrow (*Passer domesticus niloticus*) in Bahaira.
5. Family Laelapidae represented by one new species *Hypoaspis* n. sp. from feces of Domestic pigeon (*Columba livia domestica*) in Fayoum.
6. Family Ascidae represented by one new species *Blattisocius* n. sp. from House sparrow nest (*Passer domesticus niloticus*) in Giza and from Cattle egret nest (*Ardeola ilis ilis*) in Fayoum.

Suborder Actinedida represented by four new species as follow:

1. Family Syringophilidae represented by one new species *Syringophiloides* n. sp. from nest of House sparrow (*Passer domesticus niloticus*) in Cairo.

2. Family Acarophenaxidae represented by one new species *Acarophenax* n. sp. from nest of Mallard (*Anas platyrhyncha platyrhyncha*) in Behaira.
3. Family Cheyletiellidae represented by one new species *Ornithocheyletia* n. sp. from House sparrow skin, *Passer domesticus niloticus* and Hooded crow skin, *Corvus corone sardonius*, in Cairo.
4. Family Harpyrhynchidae represented by one new species *Harpyrhynchus* n. sp. from Rock pigeon skin (*Columba livia schimperi*) in Qena.

Suborder Acaridida represented by 6 new species and two first records sorted as follow:

1. Family Analgidae represented by one new species *Megninia* n. sp. from Turtle dove feather (*Streptopelia turtur arenicola*) in Beni Suief
2. Family Dermoglyphidae represented by two new species and one male first record these were; *Dermoglyphus* n. sp. from Turtle dove feather (*Streptopelia turtur arenicola*) in Beni Suief, *Paralges* n. sp. from Marbled duck nest (*Anas angustirostris*) in Sohag and *Dermoglyphus columbae* Sugimoto from Palm dove feather (*Streptopelia senegalensis aegyptiacus*) in Beni Suief.
3. Family Xolalgidae represented by one female first record *Leptosphyra centropoda* from Golden plover (*Charadrius apricarius apricarius*), in Giza.
4. Family Avenzoariidae represented by two new species *Avenzoaria* n. sp. 1 collected from Turtle dove feather, *Streptopelia turtur arenicola* in Sohag and *Avenzoaria* n. sp. 2 collected from Ostrich feather (*Struthio camelus*) in Giza.
5. Family Falculiferidae represented by one new species *Falculifer* n. sp., Turtle dove feather (*Streptopelia turtur arenicola*) in Giza.

Morphological description of the new species collected was made and taxonomical keys were given.

According to the feeding habits, mites collected were grouped into four groups:

1. Feather mites, these include the families; Syringophilidae; Raphignathidae; Macronyssidae; Dermoglyphidae; Procto- phyllodidae; Analgidae; Avenzoariidae; Cheyletidae; Laela- pidae; Dermanyssidae; Harpyrhynchidae; Pyroglyphidae; Chortoglyphidae; Glycyphagidae; Stigmaeidae; Oribatulidae; Parasitidae; Acarophenaxidae; Syringobiidae; Eupodidae; Pygmephoridae; Caligonellidae; Epidermoptidae; Acaridae; Ameroseiidae; Bdellidae; Trombidiidae; Tarsonemidae; Xo- lagidae; Uropodidae and Argasidae.
2. Skin parasites, these include the families: Macronyssidae; Dermanyssidae ; Cheyletiellidae and Harpyrhynchidae.
3. Mites parasitizing on the nests. These include the families: Phytoseiidae; Dermanyssidae; Macronyssidae; Oribatulidae; Laelapidae; Rhodacaridae; Digamasellidae; Ascidae; Cun- axidae; Rhagidiidae; Cheyletidae; Pyemotidae; Stigmaeidae; Raphignathidae; Trombidiidae; Pyroglyphidae; Caligone- llidae; Acaridae; Glycyphagidae; Oribatulidae; Argasidae; Phytoseiidae; Chortoglyphidae; Parasitidae; Bdellidae; Epilohmanniidae; Ameroseiidae; Eupodidae; Acarophena- xidae; Scutacaridae; Eupalopsellidae; Syringophilidae; Rectij- anuidae; Syringobiidae; Suidasiidae; Eupodidae; Tydeidae and Tarsonemidae.
4. Mites parasitizing on the feces. These include the families: Digamasellidae; Ameroseiidae; Macrochelidae; Macronyssidae; Laelapidae; Pyroglyphidae; Acaridae; Chortoglyphidae; Glycyphagidae; Uropodidae; Epilohmanniidae; Cheyletidae; Eupodidae; Cunaxidae; Pyemotidae; Stigmaeidae; Argasidae; Alloptidae; Phytoseiidae; Oribatulidae; Ascidae; Derm- anyssidae; Pterolichidae and Suidasiidae.