

**A STUDY ON THE ROLE OF SOME AGRICULTURAL
WILD AND DOMESTIC VERTEBRATES AS
TRANSMITTERS OF STORED PRODUCTS PESTS**

BY

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B.Sc. Agric. Sc . (Entomology), Ain Shams University , 1998

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ABSTRACT

Tarek Sherif Hafez: A Study on the Role of Some Agricultural Wild and Domestic Vertebrates As Transmitters of Stored Products Pests. Unpublished M.Sc. thesis, Department of Plant Protection, Faculty of Agriculture, Ain Shams University, 2005.

Random samples of poultry food, litter and feather of chickens, ducks, pekeeney ducks, geese, pigeons and rabbits litter (domestic animals) and quails, rozella birds, zebra birds and cockatiel birds (wild animals) were collected monthly from poultry farms, farmer's houses and public houses at Giza, Qualubya, and Minufya Governorates during summer, autumn and winter of 2001. Mites belonging to twenty-seven families of four suborders; viz., Gamasida, Actinedida, Acaridida and Oribatida plus the hypopal stage of family Acaridae, were collected. The highest number of mites was collected from Qualubya (22228.5 mites belonging to 21 families), followed by Minufya (11380.6 mites belonging to 10 families) and Giza (6903.7 mites belonging to 13 families).

An average of 9110.4 mites (belonging to 22 families), 24367.5 mites (belonging to 21 families) and 7034.9 mites (belonging to 8 families) were extracted from samples collected during summer, autumn and winter, respectively.

The total number of mites associated with birds feather (chickens, ducks, pekeeney ducks, quails, goose and zebra birds) was 3854.8 mites, belonging to Acaridae, Ascidae, Cheyletidae, Glycyphagidae and Pyroglyphidae.

Mites associated with rabbits litter were as high as 9822.4 belonging to 14 families and the hypopal stage. The average number of mites associated with bird's litter was 26391.8 mites belonging to 25 families. Of these, an average of 3491.5 mites belonging to 7 families was associated with the wild birds. The total number of mites associated with litter of domestic birds was 22900.3 mites belonging to 25 families.

The average number of mites infesting poultry food (stored and leftover food) was 443.8 mites belonging to 6 families. Of these 48.8 mites belonging to two families (Cheyletidae and Acaridae) found associated with stored food. While 395 mites belonging to 6 families were found in leftover food. The highest number of mites recorded in the leftover food was 311 mites belonging to family Acaridae.

Declaration of the role of the animals under investigation and their habitat as a source of stored product mites also the dominance of occurrence of the recorded mite families were discussed in details.

Key words: poultry houses, agricultural wild vertebrates, agricultural domestic vertebrates, mites, gamasida, actinedida, acaridida, oribatida, litter, feather, stored food.

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CONTENTS

	Page
I. INTRODUCTION	1
II. REVIEW OF LITERATURE	3
III. MATERIAL AND METHODS	23
IV. RESULTS AND DISCUSSION	25
1. Classification	25
1.1. Key to the Orders and Suborders	25
1.2. Key to the families belonging to Suborder Gamasida	32
1.3. Key to the families belonging to Suborder Actinedida	35
1.4. Key to the families belonging to Suborder Acaridida	38
2. Redescription, dominance and the average number of mites per each recorded family during the period of investigation at three Egyptian Governorates	40
2.1. Order Parasitiformes, Suborder Gamasida Family Uropodidae Berlese, 1917	40
2.2. Family Rhodacaridae Oudemans, 1902	42
2.3. Family Macrochelidae Vitzthum, 1930	43
2.4. Family Parasitidae Oudemans, 1901	46
2.5. Family Ascidae Voigts and Oudemans, 1905	48
2.6. Family Ameroseiidae (Evans, 1963).	52
2.7. Family Phytoseiidae Berlese, 1916	54
2.8. Family Dermanyssidae Kolenati, 1859	57
2.9. Family Laelapidae Berlese, 1892	59

	Page
2.10. Order Acariformes Suborder Actinedida Family Tarso- nemidae Kramer, 1877	61
2.11. Family Pygmephoridae Cross, 1969	64
2.12. Family Pyemotidae Oudemans, 1937	66
2.13. Family Acarophenacidae Cross, 1965	68
2.14. Family Cheyletidae, Leach, 1815	70
2.15. Family Tetranychidae Donnadieu, 1875.	74
2.16. Family Raphignathidae Kramer, 1877.	76
2.17. Family Stigmaeidae Oudemans, 1931.	77
2.18. Family Rhagidiidae Oudemans, 1922	78
2.19. Family Tydeidae Kramer, 1877	80
2.20. Family Bdellidae Duges, 1834	82
2.21. Family Cunaxidae Sig Thor, 1902	84
2.22. Order Acariformes Suborder Acaridida Family Chorto- glyphidae Berlese, 1897	86
2.23. Family Acaridae Ewing and Nesbitt, 1942	88
2.24. Family Glycyphagidae Berlese, 1887	91
2.25. Family Sarcoptidae Trouessart, 1892	94
2.26. Family Pyroglyphidae Cunliffe, 1958	96
2.27. Order Acariformes Suborder Oribatida Family Oribatul- idae Jacot, 1929.	99
3. Mite families inhabiting feather, litter and poultry food	101
4. Mite families associated with samples of different domestic and wild agricultural animal materials collected from Giza, Minufya and Qualubya Governorates	103

	Page
5. Mites associated with some domestic and wild agricultural animals during summer, autumn and winter	106
6. Mites associated with feather of different domestic and wild agricultural birds	109
7. Mites associated with litter of different domestic and wild agricultural animals	111
8. Mite families inhabiting chicken food before feeding and leftover food	113
V. SAMMARY	117
VI REFERENCES	121
ARABIC SUMMARY	

LIST OF TABLES

Table	Page
1 Average number of uropodid mites inhabiting chickens litter and leftover food in Qualubya Governorate through summer	41
2 Average number of rhodacarid mites inhabiting rabbits litter collected from Giza and Qualubya Governorats during autumn	43
3 Average number of macrochelid mites inhabiting rabbits and pigeons litter in Giza and Qualubya Governorates during autumn and summer.	46
4 Average number of parasitid mites inhabiting rabbits litter from Giza and Qualubya Governorates during autumn and winter	48
5 Average number of ascid mites inhabiting 1kg-samples of 9 sources collected from Giza, Qualubya and Minufyia Governorates during summer, autumn and winter.	51
6 Average numbers of phytoseiid mites inhabiting rabbits and ducks litter in Qualubya Governorate during autumn.	56
7 Average number of dermanyssid mites inhabiting chickens, ducks and pigeons litter in Qualubya and Minufyia Governorates, during summer and autumn	59
8 Average number of tarsonemid mites inhabiting 6 litter sources in Giza and Qualubya Governorates during summer, autumn and winter	64
9 Average number of pygmephorid mites inhabiting rabbits, ducks and pigeons litter in Giza and Qualubya Governorates during summer, autumn and winter	66
10 Average number of acarophenacid mites inhabiting geese and zibra birds litter in Giza Governorate during summer	70
11 Average number of cheyletid mites inhabiting feathers and litter of 9 wild and domestic agricultural animals in Giza, Qualubya and Minufyia Governorates during summer, autumn and winter	72

Table	Page
12 Average number of tetranychid mites inhabiting chickens and rabbits litter in Qualubya Governorate during summer and autumn.	75
13 Average number of stigmaeid mites inhabiting litter of geese and pigeons in Qualubya Governorate during summer	78
14 Average number of tydeid mites inhabiting litter of 6 domestic agricultural animals in Giza, Qualubya and Minufya Governorates during summer and autumn	82
15 Average number of bdellid mites inhabiting litter of pekeeney ducks, pigeons and zibra birds in Giza, Qualubya and Minufya Governorates during summer and autumn	84
16 Average number of chortoglyphid mites inhabiting litter of chickens and pigeon at Qualubya Governorate during summer and autumn . .	87
17 Average number of acarid mites inhabiting feather of pekeeney ducks, litter of 6 agricultural animals and leftover food and food before feeding at Giza, Qualubya and Minufya Governorates during summer, autumn and winter	90
18 Average number of hypopal stage inhabiting litter of rabbits and chickens at Giza and Qualubya Governorates during autumn and winter	91
19 Average number of glycyphagid mites inhabiting feather of pekeeney ducks and litter of 6 agricultural animals at Giza, Qualubya and Minufya Governorates during summer, autumn and winter	94
20 Average number of sarcoptid mites inhabiting litter of rabbits and pigeons at Giza and Qualubya Governorates during summer and autumn	96
21 Average number of pyroglyphid mites inhabiting feather, litter of 4 agricultural animals and leftover food at Qualubya and Minufya Governorates during summer and autumn	98

Table		Page
22	Average number of oribatulid mites inhabiting litter of chickens, ducks and pigeons and leftover food at Qualubya and Minufya Governorates during summer, autumn and winter	100
23	Average number, percentage of occurrence and dominance of mites associated with samples (1Kg. each) of different domestic and wild agricultural animal materials	102
24	Average number, percentage of occurrence and dominance of mites associated with feather, litter, food samples (1Kg. each) of different domestic and wild agricultural animals collected from Giza, Minufya and Qualubya Governorates	105
25	Average number, percentage of occurrence and dominance of mites associated with samples (1Kg. each) of different domestic and wild agricultural animal materials during summer, autumn and winter . . .	108
26	Average number of mites associated with feather samples (1Kg. each) of different domestic and wild agricultural animals	110
27	Average number of mites associated with litter samples (1Kg. each) of different domestic and wild agricultural animals	112
28	Average number of mites associated with stored and leftover poultry food per Kg. each	113

LIST OF FIGURS

Fig.		Page
1	Dendogram illustrating possible relationships within the subclass Acari associated with agricultural wild and domestic vertebrates...	26
2	External respiratory and associated structures in Gamasida	26
3	Venter of female. Coxae fused into ventral body wall, forming coxisternal region delimited by epimera	27
4	Ventral view of acarid gnathosoma. Palpi with only two segments	25
5	Pretarsus with an empodial claw and fleshy pulvillus, or pretarsus sucker-like	28
6	Chelicerae typically stylettiform	29
7	Palpi modified into thumb-claw process	29
8	Stigmata open at or between the bases of the chelicerae, at the bases of the Gnathosoma, or on the humeral angles of the propodosoma	30
9	Propodosomal sensory organs elongate, or short and capitate	30
10	Empodial processes commonly rayed, or pad-like, often with tenent hairs	31
11	Mouthparts of Oribatida; chelicerae chelate, dentate; palpi simple, rutella present	31
12	Sternal plate. Sternals 1 inserted in a weakly defined anteromarginal extension	33
13	Epigynial shield rounded, expanded to nearly about anal shield assuming invaginated aspect posteriorly	33
14	Venter of female. Epigynial shield truncate posteriorly; ventrianal shield broad	34
15	Venter of female. Epigynial shield pointed or rounded posteriorly	34
16	Venter of gnathosoma. Corniculi divided distally	36
17	Dorsum of tarsonemid female with a pair of anterolateral prodorsal stigmata and associated trachea	36

Fig.		Page
18	Acaridida with scleritic ring-like structures, or two pairs of well developed genital acetabula.	38
19	Venter of female Acaridida. Genital acetabula generally reduced	39
20	Acarid pretarsus; empodial claw surrounded by a well developed fleshy pulvillus	39
21	Family Uropodidae	41
22	Family Rhodacaridae	43
23	Family Macrochelidae	45
24	Family Parasitidae	47
25	Family Ascidae	49
26	Family Ameroseiidae	53
27	Family Phytoseiidae	56
28	Family Dermanyssidae	58
29	Family Laelapidae	60
30	Family Tarsonemidae	63
31	Family Pygmephoridae	65
32	Family Pyemotidae	67
33	Family Acarophenacidae	69
34	Family Cheyletidae	71
35	Family Tetranychidae	75
36	Family Raphignathidae	76
37	Family Stigmaeidae	77
38	Family Rhagidiidae	79
39	Family Tydeidae	81
40	Family Bdellidae	83
41	Family Cunaxidae	85

Fig.		Page
42	Family Chortoglyphidae	86
43	Family Acaridae	89
44	Family Glycyphagidae	92
45	Family Sarcoptidae	95
46	Family Pyroglyphidae	97
47	Family Oribatulidae	99
48	Average number of mites associated with samples (1Kg. each) of different domestic and wild agricultural animal materials	103
49	Average number of mites associated with feather, litter, and food samples (1Kg. each) of different domestic and wild agricultural animals collected from Giza, Minufyia and Qualubyia Governorates	106
50	Average number of mites associated with samples (1Kg each) of different domestic and wild agricultural animal materials during summer, autumn and winter	109
51	Average number of mites associated with feather samples (1Kg each) of different domestic and wild agricultural animals	110
52	Average number of mites associated with litter samples (1 Kg. each) of different domestic and wild agricultural animals	113