

Determination of Sheep Ectoparasites Fauna in El Monshah District, Sohag Governorate, Egypt

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ABSTRACT

The present work was aimed to identify Ectoparasites Fauna of Houses Sheep sheds at El Monshah District, Sohag Governorate, Egypt. during 2016-2017 year. The results were revealed the presence of seven Ectoparasites infested with various species from insects and mites, included that three species of Flies were *Musca domestica*, *Muscina canicularis* & *Sarcophaga* sp; one of Mosquitoes was *Culex pipenes* ; two of fleas were *Pulex irritans* & *Xenopsyllae cheopis*. While The study of ectoparasite from acari show that one species of mites *Sarcoptes scabiei* infested some houses sheep farm.

Keywords: *Musca domestica* – *Sarcophaga* sp – *Culex pipenes* – *Pulex irritans* – *Xenopsyllae cheopis*

INTRODUCTION

Ruminants as cattle, sheep and goats are worldwide important. Many of these ectoparasites species have their breeding sites very close to their hosts, so that they are practically always present. (Schnieder, 2008).The ectoparasites have a major effect on the husbandry and productivity of livestock, weight gain (Gibney et al., 1985; Devaney et al., 1992), milk production and quality of hide (Coles et al., 2003). They can cause harm due to their blood feeding activities and can transmit many pathogenic organisms (Geden et al., 1990; Watson et al., 1997; Milnes & Green, 1999; Nafstad & Gronstol, 2001 and Colwell & Himsl- Rayner, 2002).

Many ectoparasites harm the health or their hosts by blood sucking (e.g. ticks, mite, biting, flies, fleas, lice and bugs). This leads to primarily often enormous losses of blood. In addition to some of the blood-sucking ectoparasites may be act as vectors of some diseases, such as ticks may transmit stages of Babesia, Theileria, Rickettsiales, Several bacteria and viruses. Blood-sucking insect such as biting flies, of diseases as midges turned out as vectors of bluetongue virus (Conraths et al., 2007; Raether & Harder, 2008 and Mehlhorn et al., 2010).

The economic impact from changes in animal husbandry and the need for increased the parasite surveillance and control have increased the need for a better understanding of current distribution and prevalence of livestock and domesticated animal ectoparasites. The present work of investigations aims to identify the ectoparasites Fauna of Houses Sheep sheds.

MATERIALS AL AND METHODS

The present study was conducted in Houses Sheep sheds at El Monshah District, Sohag Governorate, Egypt. Samples were taken each month during one successive season 2016 - 2017. The people house including the buildings of animal- sheds and animal food storages. This building contains sheep sheds.

Samples were taken monthly from 50 individuals of the difference animal body chosen to the study. Samples were individually anaesthetized in a jar containing a cotton pad moistened with chloroform, then brushed in a deep white plate using a relatively hard brush. Collected ectoparasites were preserved in plastic tubes containing 70% ethyl alcohol and labeled with necessary information for identification.

RESULTS AND DISCUSSION

Data in table (1) show the results were revealed the presence of seven Ectoparasites infested with various species from insects such as Flies,

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Mosquitoes, fleas & lice (Insecta) and mites (Acari), from this studied found that three species of Flies were *Musca domestica*, *Muscina canicularis* & *Sarcophaga* sp; one of Mosquitoes was *Culex pipenes*; two of fleas were *Pulex irritans* & *Xenopsyllae cheopis*. While the study

of ectoparasite from acari show that one species of mites *Sarcoptes scabies* infested some houses sheep farm. These results to be used in the development of a future plan in effective strategy for implementation of sheep ectoparasites programs in Houses Sheep sheds.

Table1. Survey of arthropods in Houses Sheep sheds at El Monshah District, Sohag Governorate, Egypt, 2016-2017.

Area Arthropods		Houses Sheep farm
Insecta	Flies	<i>Musca domestica</i>
		<i>Muscina canicularis</i>
		<i>Sarcophaga</i> sp
	Mosquitoes	<i>Culex pipenes</i>
	Fleas	<i>Xenopsyllae cheopis</i>
		<i>Pulex irritans</i>
Acari	Mites	<i>Sarcoptes scabies</i>

The results similar with Maher et al. (2012). show that six species of flies and one species of mosquito were recorded in farm animal of Assiut University during 2008 – 2010. Biting and non-biting species of the recorded files were belonging to four families during the course of the present work. These species were identified as follows: (1) Family: Muscidae (*Musca domestica* Macq, *Muscina canicularis* Wied, *Stomoxys calcitrans* L.) (2) Family: Tabanidae (*Tabania* sp Merg). (3) Family: Sarcophagidae (*Sarcophaga* sp. L.) (4) Family: Calliphoridae (*Phormia regina* Meig). The house

fly, *Musca domestica* Macq was collected from the farm animal in high numbers during the two years as compared with the other species. The stable, *Tabania* sp. was recorded only in buffalo sheds, but the billing fly had never recorded in sheep farm, *Stomoxys calcitrans* was collected with considerable numbers from the buffaloes and cattle farms. *Sarcophaga* sp. and *Phormia regina* were recorded in comparatively low numbers through the two years in the area of study. *Sarcoptes* sp., was collected from sheep-sheds These results may be due to the presence of organic matter in animal production farm.

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