

# Myiasis of Domestic Animals in Iraq

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## Abstract

This work carried out to detect dipterous fly agents of Myiasis of domestic animals in Iraq during the year 2017. Seventy cases of Myiasis were determined in the domestic animals distributed in five provinces: Baghdad, Diyala, Wasit, Diwaniya and Basrah. Fifty one cases were wound Myiasis, and 19 were various Myiasis cases for aural five rectal, four urogenita, three ophthalmic and one oral. Four species of dipterous flies larvae: *Chrysomya bezziana*, *Chrysomya megacephala*, *Lucilia sericata*, *Chrysomya albiceps* were identified as Myiasis agents. *Chrysomyabeziziana* was most prevalent species has been recording 50 injured, 27 of them injured in sheep. The larvae were collected from six species of domestic animals; sheep were more susceptible to Myiasis followed by cattle, dog, goat, buffalo and cat.

## Index terms—

## 1 Introduction

Myiasis is the infestation of live animals with dipterous larvae which at least for a certain period feed on the host dead or living tissues ;liquid body substance or ingested food (Zumpt; 1956). No attention has been given to myiasis in domestic animal in Iraq until the first recorded cases of *chrysomya bezziana* in 1996 in Baghdad (OIE1996, Abdul-Rassol 1996) (Alani 1997).Veterinary directorate informed the national organization FAO,OIE ,AOAD to control the outbreak with international effort. A result of the surveillance program was held through a team in the veterinary directorate with representative veterinarian in each vet hospital in each province and the distribution of Traps at all vet. dispensaries through all provinces to detect the different type of fly under the leading of the first author and the diagnosis of the adult fly and larvae by the staff of Entomology unit and the confirmation the last author.this paper discuss the myiasis cases detected in domestic animals in Iraq during the year 2017 and to dedicated the last author who died during preparation of the this paper at 2018.

## 2 II.

## 3 Materials and Methods

Myiasis cases were obtained from the national team veterinarians in each province from veterinary hospitals extracting larvae from animals and send them to central veterinary Diagnostic Laboratory, Entomology unit for the identification with complete history of the cases. Larvae were collected from deep wound at least ten larvae from each case dipped in worm water and then in 70% alcohol and examined by stereomicroscope, diagnosis of larvae will be according to Spradbery1991.

## 4 Result and Discussions

A total of seventy cases of Myiasis have been collected in study area. In table no.(2) Four species *chrysomy-bezziana*, *ch.megacephala*, *ch.albices* and *lucilia sericata* were identified as etiological agent of the myiasis, *Ch. Bezziana* (50) cases represent 66.67%, *ch.megacephala* (13),17.34% *L.sericata* (7), 9.34%, *ch.alpiceps* ( 5), 6.67%. Among animals most myiasis were determined in sheep (39), represent 5.57%, then cattle (20), 2.85%, dog (5),0.71% ,Goat (4),0.57%, buffalo (1),0.14% and cats1.70 .*Ch. bezziana* (50), *Ch. megacephala* (13), *L. sericata* (7), *Ch. albiceps* 5. 75 *Ch. bezziana* 66.67%, *Ch. megacephala* 17.34%, *L. sericata* 9.34%, *Ch. albiceps* 6.67%) 3. Sheep 39, Cattle 20, Dog 5, Goat 4, Buffalo 1, Cat 1.70 Among animal the part of animal body envolved as

## 4 RESULT AND DISCUSSIONS

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fallow Fatty tail 22 case, Thigh 6 case, Ear 6 case, Anus 5 case, Leg 5 case, Umbolicus 4 case, Vagina 4 case, Eye 4 case, Udder 3 case, Genu 2 case, Flank 2 case and one case for each of: Abdomen, Back, Femoral, Head, Horn, Mouth, Nek. Among months the number of regesterd cases are in November 13 case, October 12 case, May 11 case, July 7 case, August 5 case, December 5 case, September 4 case, Janeuary 4 cases, Apri 4 casel, June 3 case, February 1 case, March 1 case.

There are many literature about myiasis in animals or human worldwide (Zumpts, 1965 and spradbey, 1991)inIraq. Abul-hab, 1980, Al-Ani 2014, Abdul-rassoul etal 2018) In this studay chrysomya bezziana still the most important causes of myiasis and was the predominant species in Iraq. L.sericata was also detected as a myiasis causing agent and this in agreement with result of abdul\_rassoul etal, 2018. It was abserved during the diagnosis of larvae that the third stage larvae were found in the most of the cases, 1stage and second stage larvae were very less detected fallow up myiasis in Iraq still continuing through a strict programe during every year. <sup>1</sup>

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Year	17 18	Urogenital
2020	19 20	Wound
14	59 21	Oral
	22 60	Wound
	61 23	Rec-
	62 24	tal
	63 25	Wound
	64 26	Wound
	65 27	Au-
	28 29	ral
	30 66	Wound
	67 68	Wound
	31 69	Wound
	32 70	Wound
		Wound
		Au-
		ral
		Rec-
		tal
		Wound
		Wound
		Uro-
		gen-
		ital
		Wound
		Wound
		Wound
		Wound
		Wound
		Wound
		Wound
		Wound
		Wound
		Wound
		Wound

D	M 33	Wound
D	34 35	Au-
D	36 37	ral
G	38 39	Au-
D	40 41	ral
)	42 43	Wound
Vol-		Wound
ume		Au-
XX		ral
Is-		Rec-
sue		tal
I		Rec-
Ver-		tal
sion		Wound

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Agent species	Buffalo	Cat	Host Cat- tel	Dog	Goat	Sheep	Sum	Percent (%)
Ch. albiceps	00	01	02	00	00	02	05	6.67
Ch. bezziana	01	00	14	05	03	27	50	66.67
Ch. megacephala	00	00	05	00	01	07	13	17.34
L. sericata	00	00	01	00	00	06	07	9.34

As show in table no-1wound Myiasis 51 Cases,  
Aural 6 cases, Rectal 5 cases, Urogenital 4, cases,  
Ophthalmic 3 cases, Oral 1 cases.

Figure 2: Table ( 2

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