

INCIDENCE OF CATTLE MYIASIS IN CENTRAL IRAQ

S.R. Ali, Department of Parasitology, College of Veterinary Medicine, University of Baghdad.

SUMMARY

Through a full calander year a total of 2220 (1089 male and 1131 female) cattle were examined for *Hypoderma* spp. No difference was noticed in infestation rates of the two sexes. Larvae found on the back region of the animals during late Autumn and Winter months with the peak rate of infestation (25.2%) in February. While, amongst the months with positive cases, April and November showed the lower rates 3.1% and 3.4% respectively.

INTRODUCTION

Larvae of warble flies *Hypoderma bovis* and *Hypoderma lineata* are known to be injurious to cattle. In addition to the damage of hides resulted by these larvae, irritation and discomfort of the animals may result in considerable economical losses. These losses have been estimated by millions of dollars (Chandler and Read, 1961).

In Iraq very little is done to ascertain the impact of this malady. In this country, however, the first record which was on the mere existence of the larval stages of *H. bovis* and *H. lineata* came in a report submitted to the FAO by Leiper (1957). Hussain (1963) and Derwesh (1965) have referred, depending upon the above

reference, to the presence of these two species in a list of parasitic phona.

The only other work available for this region was conducted about 15 years ago as a survey of warble flies in cattle, among five domestic ruminant species, slaughtered at Baghdad abattoir, in which the incidence of maggots of these flies has been recorded (Abul-hab and Al-S'adi, 1973).

The present study aimed at the elucidation of the seasonal variation in rates of warble fly larval infestation of cattle and whether there is any difference in the susceptibility of the two sexes.

MATERIALS AND METHODS

Through an average of two visits a week a total of 2220 (1089 male and 1131 female) cattle were examined for the presence of larvae of *Hypoderma* spp. in Baghdad slaughter houses for a period of full calander year. All animals were of indigenous and mixed breeds.

Before slaughtering, animals were examined by palpation of the back and shoulders regions, for any suspicious nodule. After slaughtering, carcasses were examined for the presence of maggots. Necessary information including, data on; age and sex of the animals were recorded on a previously prepared form. After collection, larvae were preserved in labeled vials containing 70% alcohol for later count and identification.

RESULTS

With the exception of only one case which had suspicious nodules on the back and was negative for maggots, the remaining animals examined gave the same results in both pre-and post-slaughtering examination. The numbers

examined and positive for each month are shown in the table 1, the highest number of positive cases (35) was during February and the lowest (5) was in April. However, no positive cases were recorded during the months May to October. In regard to sex, there was no noticeable difference in the rate of infestation between the two sexes. These rates were 6.55% and 6.38% for males and females respectively. Hence, the overall monthly rates of infestation was plotted on the Figure 1, which shows that the highest rates encountered were during Winter months; December, January and February which were; 14.2%, 21% and 25.2% respectively. Amongst the months with positive cases, April and November showed the lowest rates (3.1% and 3.4% respectively).

Table 1: Monthly rate of infestation of cattle with larvae of *Hypoderma* spp. in Baghdad region-Iraq.

Month	No. Exam.				%Pos.
	Male		Female		
	+	-	+	-	
Jan	16	60	13	49	21
Feb	17	48	18	56	25.2
March	9	63	9	69	12
Apr.	2	89	3	67	3.1
May	-	79	-	64	-
June	-	64	-	65	-
July	-	124	-	116	-
Aug	-	74	-	66	-
Sept	-	49	-	51	-
Oct	-	129	-	166	-
Nov	4	140	6	147	3.4
Dec	18	104	23	143	14.2
Total	66	1023	72	1059	

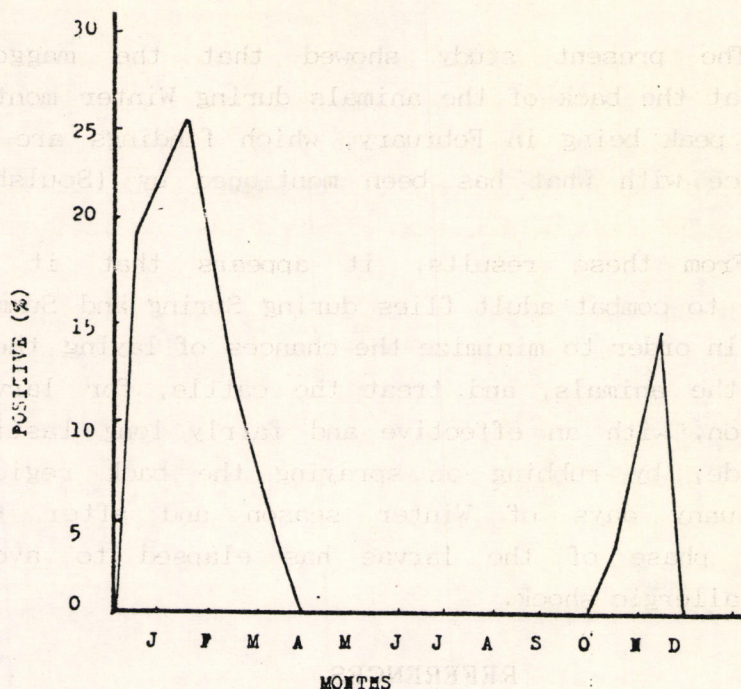


Fig.1 : Monthly Rate of Infestation of Cattle by *Hypoderma* spp. in Baghdad Area.

DISCUSSION

Results of this investigation indicate that any of the pre-or post-slaughter examination could be reliable. Yet post-slaughtering examination and demonstration of the maggots is advisable to exclude nodules that might result of any probable trauma. The similarity between the rates of infestation of the two sexes suggests that adult flies are equally attracted to both.

The monthly incidence and the rates of infestation for different months followed a similar trend found by Abul-hab and Al-Sa'adi (1973) in a study conducted in the same region.

The present study showed that the maggots appeared at the back of the animals during Winter months with the peak being in February, which findings are in consistence with what has been mentioned by (Soulsby, 1982).

From these results, it appears that it is advisable to combat adult flies during Spring and Summer seasons, in order to minimize the chances of laying their eggs on the animals, and treat the cattle, for larval infestation, with an effective and fairly long lasting insecticide, by rubbing or spraying the back region, during sunny days of Winter season and after the migratory phase of the larvae has elapsed to avoid probable allergic shock.

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نسبة وجود بقرقات نغف الابقار في المنطقة

الوسط من العراق

سامي رضا علي، فرع الطفيليات، كلية الطب البيطري، جامعة بغداد.

الخلاصة

خلال سنة تقويمية كاملة جرى فحص ٢٢٢٠ (١٠٨٩ ذكور و ١١٣١ انثى) من الابقار للتعرف على نسبة خمجها ببقرقات الذبابة Hypoderma لم نلاحظ فرقاً في نسبة الخمج لكلا الجنسين. وقد وجدت البقرقات في منطقة الظهر في نهاية الحريف وفصل الشتاء حيث ظهرت اعلى نسبة (٢٥٢%) في شهر شباط. ومن بين الاشهر التي وجدت فيها حالات خمجة ظهرت اوطأ النسب في شهري مايو وتشرين الثاني حيث كانت ٣% و ٤% لهذين الشهرين على التوالي.