

EPIDEMIOLOGY OF LARVAE OF *Chrysomya bezziana* IN BUFFALOS IN BASRA PROVINCE, SOUTH OF IRAQ.

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ABSTRACT

The study include 250 waters buffalos from the marshes of Basrah during 2006. There 32 were positive cases of *Chrysomya bezziana* larvae causes sub coetaneous myiases. This report consider the first recards of OWS in buffalo. The study showed that foot & mouth disease, tics & lice bite are among many other factors for OWS to but there eggs in small injury and causes myiases in mammals. The study shows that *Chrysomya bezziana* larvae was resistan to water environment in which they live.

INTRODUCTION

The old world screw worm fly, *Chrysomya bezziana* is an obligatory parasite, myiasis causing pest of living animals (Kguardhauch *et al.*, 2001).

The larvae of *Chrysomya bezziana* infest living tissue thereby causing myiasis in a wide range of worm- blooded host species (Spradbery and Vauniasingham, 1980). Causing loss of condition, laminess, sterility and death (Humphery *et al.*1980, Spradbery, 1991).

A similar incidence of *Chrysomya bezziana* infesting FMD lesion of cattle has been reported in India (Kumar and Ruprah, 1984). The first record of *Chrysomya bezziana* in Iraq by Abdul-Rassol, (1996), in animals and by Al-Rubiay, (1998), in human at Basrah Province.

In Basrah there were many infested buffalo with calliphoridae spp. in the ear, (Azizz *et al.*, 1999). Al-helfi *et al.* (1999), record first case of continuous myiasis in sows with lucilia serecata in Basrah. Host record include cattle, sheep, goats, buffalo, pigs, chicken, dogs, cats, horses, and man (Patton, 1920, 1922; Stoddard & Peck, 1962; Norris & Murray, 1964). Now we have first record of myiasis with *Chrysomya bezziana* larvae in buffalo in Iraq. in 2001, AL-helfi proves that were many cases of myiasis of Diptera in basrah with amention to its control.

Myaisis made large economical loss in animal health and product when causing death (Hall, 2001).

MATERIAL & METHODS

Buffalo infested with larvae of *Chrysomya bezziana* after FMD or tics bite. Larvae were taken to veterinary laboratory in order to be examined Larvae were taken by thumb forceps then put in a smooth container with 70 % alcohol, Identification was carried out depending on the key of Diptera (Al-helfi, 2001), Laboratory result indication that it belonged to Diptera–Calliphoridae – *Chrysomya bezziana* (figure 1, 2). Buffalo treated with general antibiotic, analgesic, hydrocortisone, and localized treatment (Iodine 18%, Butanol and coated wound with cotton and neogentian around it.



Fig (1). Posterial spiracle of larvae



Fig (2). Adult fly of OWS

RESULTS & DISCUSSION

This is the First records of myiasis (*Chrysomya bezziana*) in buffalos in Iraq. Buffalos are aquatic animals swimming in marsh from 4-6 hrs daily because of there habit. Buffalos are infected with FMD or tics and lice bite (figure 3,4,5) that made injury. Then blood will diffuse in the water and OWS –fly becomes attractive to the injuries to by their eggs in it.

Then the larvae invade tissues and make myiasis (Chandler, 1961). Larvae are tolerantad to water and survive to live, (Patton 1920, 1922, Stoddard & Peck, 1962) Norris & Murray (1964), recorded *Chrysomya bezziana* larvae in buffalo. Kumar & Ruprah, (1984), Record myiasis in cattle caused by *Chrysomya bezziana* on lesions of FMD. Infected animals were treated by Negasunt powder with Iodine solution (18%) and broad spectrum antibiotics. For any secondary infection may occur with hydrocortisone and analgesic were using (Aziz *et al.*, 1999). Using iodine solution (5%) followed by one of amine duct with a certain concentration over a period of 72 hours, beside that an ampicilin antibiotics was given to the animal for treatment and no side effect may happened. fig (6) however many scientist use chemical insecticide to treated screw worm in animals or human, (Coppedge *et al*, 1980).

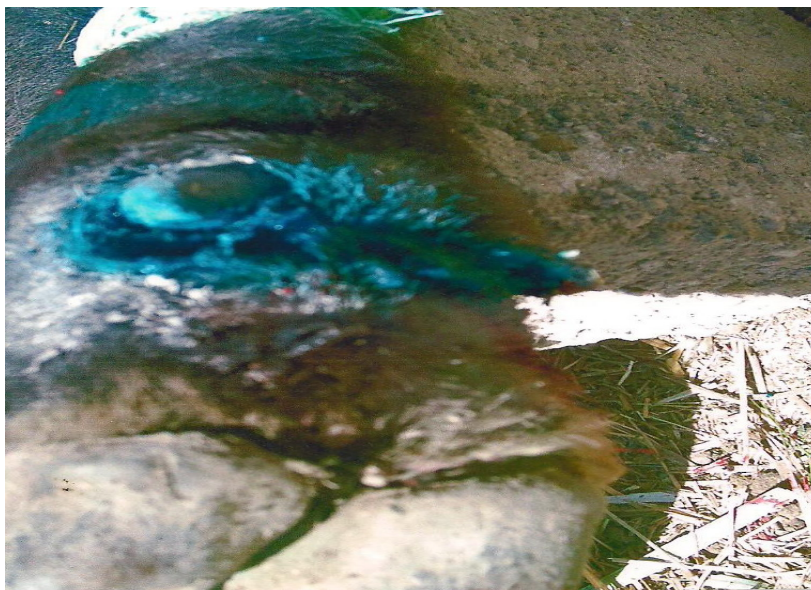


Fig. (3). Fim leasion with larvae at foot of buffalo



Fig. (4). Ear tics leasion with larvae



Fig. (5). Treatment of lesion by nagasant



Fig. (6). Treatment of lesion

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دراسة وبائية ليرقات الذبابة الحلزونية للجاموس في احوار البصرة – جنوب العراق

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الخلاصة

شملت الدراسة 250 جاموسة في احوار البصرة كما ظهرت منها 32 حالة تدويد جلدي بيرقات الذبابة الحلزونية للعالم القديم *Chrysomya bezziana* larvae وهي تسجل لأول مرة بالجاموس، وبينت الدراسة ان الاصابة بالحمى القلاعية او الجرب او عضة القراد او القمل لها الدور الاساسي في جلب بالغات الذبابة لتضع بيوضها داخل فتحات الجروح المصاحبة لهذه الحالات واحداث التدويد رغم قوة الجلد للحيوان ورغم معيشته المائية التي لم تؤثر على اليرقات ودليل مقاومتها للظروف البيئية الصعبة.