

# Incidence of Maggot Wound in Crossbred PIG in an Organized Farm

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**Abstract**—In unhygienic condition maggot wound is very common in farm animals particularly in pig. But in an organized farm with proper hygiene and managerial incidences of maggot wound was recorded. It was observed that maximum infection in hind leg (13.92%) followed by ear (11.39%) and forelimb (10.13%). Females (48.11%) and adults (54.72%) were more affected than male (26.42%) and young (19.81%) animals. Monsoon months were having higher incidences (26.13%) than the post monsoon (22.0%) and pre-monsoon (16.51%) period. Least incidences were noticed in winter months. Proper vector control and good management may reduce the incidences of maggot wound in pigs.

**Keywords:** Maggot wound, pig, season, sex, age.

## 1. INTRODUCTION

Maggot wound in pig is very common where unhygienic management and proper care is not adopted. But, in an organized farm where pigs are maintained with proper care and attention the incidences of maggot wound is very concerning. Patra *et al.* (2014) opined that the skin and body condition score reflects overall health status of pig. Turton (2001) observed that skin affections in pig mostly occur due to the results of mange, ring worm infection, greasy pig disease, diamond skin disease, physical damage by the environment, ergot poisoning or zinc deficiency. The risk factors for setting of skin infections are varied in outdoor and confined pigs and mostly dependant on environments and management practices. The maggot wound though formed mostly at external body coat and natural orifices, does affect the appetite and predisposes secondary infection. In unattended cases, the animals lost its production potential and often died (Patra *et al.*, 2014). Cargill and Davies (1999) opined that a variety of diseases, parasites and disorders affect skin of pigs that resulted in economic losses through sub-optimal growth rates. Among the various diseases of pigs wound and maggot infestation causes a great loss to the farmers. The maggot infestations are very prevalent in tropical India during pre-monsoon and monsoon season. Considering the above facts the present study was carried out in an organized pig farm to find out the incidences of maggot wound in pigs.

## 2. MATERIALS AND METHODS

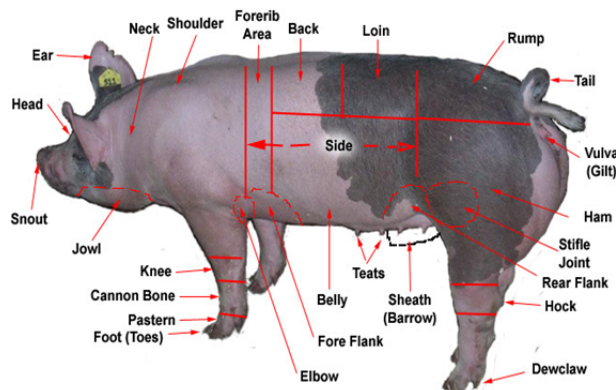
In total One hundred and six (Male 39, Female 67) crossbred pigs T X D variety (Tamworth X Deshi) of both sexes were undertaken for study for one year period from March 2015 to February 2016 at Institutes Pig Research Unit. Uniform standard managerial practices were adopted throughout the year. Routine vaccination and deworming was done periodically. The animals were housed in a cemented floor with 3 feet high side wall. Washing of floor was done daily at 9.00 AM and excreta were removed twice daily both at morning and evening. During the one year study period incidences of maggot wound in male, female, young, adult, seasonal effect and location of maggot infestation in body was observed. Descript statistics were used for analysis of data and presentation as per Snedecor and Cochran (1995).

## 3. RESULTS AND DISCUSSION

In total 79 incidences of maggot wound infestation was observed in various body location of swine during one year period. Highest incidence was observed in hind limb (13.92%), followed by ear (11.39%) and fore limb (10.13%). Least incidence was observed in ham region. Only 0.94% of incidence was observed in rump, fore flank and sheath region (Table 1). Singh and Singh (2016) also found maximum number of maggot wound in hooves in dairy animals. Highest incidence of maggot wound in limb may be due to contact with rough surfaces of concrete floor. Hind limb put more pressure on hind leg and due to putting more body weight in back region may be the cause of more incidences of maggot wound in hind limb followed by fore limb. Ear is also a sensitive area and continuous rubbing of ear in side wall may inflicted wound in ear caused maggot wound.

### Body parts of swine:

Out of 39 male animals 28 were affected with maggot wound and female were 51 out of 67 animals. Adults were more affected than young animals (Table 2). The incidences of seasonal variation was more prominent in Monsoon (June, July, August) season (26.13%), followed by post monsoon (22.0%) (September, October, November) and Pre-monsoon (16.51%)



Source: Internet ([http://www.geauga4h.org/swine/swine\\_body.htm](http://www.geauga4h.org/swine/swine_body.htm))

**Table 1: Different locations of maggot wound in the body of pig**

Sl. No.	Location in body	Animal affected		% of affected out of total animals
		Number	Percentage	
1	Snout	5	6.33	4.72
2	Ear	9	11.39	8.49
3	Jowl	3	3.80	2.83
4	Neck	7	8.86	6.60
5	Shoulder	5	6.33	4.72
6	Fore Limb	8	10.13	7.55
7	Hind Limb	11	13.92	10.38
8	Side	2	2.53	1.89
9	Back	6	7.59	5.66
10	Loin	2	2.53	1.89
11	Rump	1	1.27	0.94
12	Tail	4	5.06	3.77
13	Vulva	5	6.33	4.72
14	Testis	2	2.53	1.89
15	Fore Flank	1	1.27	0.94
16	Belly	3	3.80	2.83
17	Sheath	1	1.27	0.94
18	Ham	0	0	0
19	Rear Flank	2	2.53	1.89
20	Dew Claw	2	2.53	1.89
	Total	79	100.00	74.53

(March, April, May). Lowest incidences were observed in winter months (9.62) (December, January, February) (Table 3). The maximum infestation in monsoon may be due to increase number of vector i.e. house fly (*Musca domestica*) proliferation. Moreover in monsoon season humidity remains very high (> 95%) in this reason and gradually declines with less rainfall. Singh and Singh (2016) also found maximum number of maggot infestation in dairy animals in monsoon months. The incidences of maggot infestation are also declines after or before rainy season. There may be a direct co-relation between rainfall, humidity, increase in fly numbers and maggot wound.

The infected wounds were treated with herbal drug and all the wounds healed up properly without any untoward incident and

without any mortality of pig. Proper vector control and good management practices may reduce the incidences of maggot wound in pigs. Thus reduce the economic loss to the farmers.

**Table 2: Maggot wounds in relation to sex and age group of animal**

Variables	Animals	Number of animals observed	Number of animals affected	% of animals affected	% of affected out of total animals
Sex	Male	39	28	71.79	26.42
	Female	67	51	76.12	48.11
Age group	Young (below 8 months)	42	21	50.00	19.81
	Adult (above 8 months)	64	58	90.63	54.72

**Table 3: Maggot wounds in relation to different seasons in pig**

Sl. No.	Season	Number of animals observed	Animal affected	
			Number	Percentage
1	Pre-monsoon (March, April, May)	109	18	16.51
2	Monsoon (June, July, August)	111	29	26.13
3	Post-monsoon (September, October, November)	100	22	22.00
4	Winter (December, January, February)	104	10	9.62
	Total	106 (Avg)	79	74.26

#### 4. ACKNOWLEDGEMENT

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#### REFERENCES

- [1] Cargill, C and Davies, P. 1999. External Parasites. In: Diseases of Swine. Editors
- [2] Straw B, Mengeling W, D'Allaire S and Taylor D. Ames, Iowa State University Press, pp 669-683.
- [3] Patra M John R and Das R.K. 2013. Does folded skin predispose to maggot infestation in Ghungroo pig? International J Livestock Res. 4(1): 58-62.
- [4] Singh A and Singh D. 2016. A study on the incidence of myiasis among dairy animals in the State of Punjab, India. 9(1): 30-34.
- [5] Turton J. 2001. Skin conditions in pig. Department of Agriculture. Directorate Communication, Private Bag X144, Pretoria, 0001 South Africa. PP: 1-7.