



Comparative Study of Seasonal Incidence of Chicken Coccidia in Gangapur and Vaijapur Tehsil of Aurangabad District in Maharashtra

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ABSTRACT

During the period of 12 months (Monsoon Winter and summer Season) i.e. from, June, 2013 – May 2014, total 896 faecal samples from Gangapur and 872 samples from Vaijapur were examined for coccidial infections, out of which 270 samples from Gangapur and 269 samples from Vaijapur were positive respectively. The percentage of prevalence being 31.07% and 30.84% respectively. Comparative study shows minor differences in prevalence.

KEYWORDS : Protozoa, Eimeria, Broiler Chicken, Coccidiosis etc

Introduction:-

Domestic poultry has gained a much greater importance in animal production and constitutes a major factor in over all economy. It is realized that sum total of ravages occasioned by various parasitic infections in poultry can in no way be considered less significant than other ethiological agents. Amongst these, Coccidia can cause serious diseases in domestic animals i.e. coccidiosis. Coccidiosis is believed to be a commonest depreciator or even a potential killer of our poultry.

So medical point of view their study is very important. Several species of Coccidia cause extensive pathological damage and mortality in poultry, cattle, sheep, goat, pig and other animals. For this reason Coccidia have attracted of many workers (Chakravarty & Kar, 1947 [1], Deb et al., 1980 [2], Hortom and long, 1963 [3]; Nikam, 1999 [4]; Ray, 1945 [5]; Rahaman and Raman, 1970 [6] and Tyzzer, 1928 [7]). The study of ultra structure of Coccidia have enhanced its biological and veterinary importance. (Nikam et al. 2012)

MATERIAL AND METHODS

During the course of present investigation, an extensive survey was carried out to record the incidence of coccidia in broiler chicken particularly in Gangapur and Vaijapur Tehsil of Aurangabad District in Maharashtra. For this study intestine of broiler chicken from different localities and were examined for coccidial infections. The birds (broiler chicken) were sacrificed and various parts of the alimentary canal and caeca were examined. The faecal contents were diluted with water and sieved to remove the large faecal debris, after repeated washing the oocysts were concentrated by centrifugation at 3000 rpm for ten minutes. The oocysts were then spread out in shallow petridishes and covered with 2.5% potassium dichromate solution for sporulation. Care was taken to aerate them properly and also to prevent desiccation. The sporulation was carried out in all cases at room temperature about 28 to 32 °C.

Result and discussion:-

During the period of 12 months (Monsoon Winter and summer Season) i.e. from, June, 2013 – May 2014, total 896 faecal samples from Gangapur and 872 samples from Vaijapur were examined for coccidial infections, out of which 270 samples from Gangapur and 269 samples from Vaijapur were positive respectively. The percentage of prevalence being 31.07% and 30.84% respectively. Comparative study shows minor differences in prevalence.

Month wise analysis in Gangapur showed that maximum prevalence was during June (63.10%), followed by July, Sep, Nov, Dec, Aug, Oct, Jan, Feb, Mar, May, and April. (54.54%, 34.21%, 34.72%, 27.66%, 25.51%, 20.10%, 17.52%, 14.28%, 09.09%, 08.88%, and 06.66%). (Table No.1)

Period	No. of Samples		% Prevalence
	No. of Sample Examined	No. of Sample Positive	
June 2013	103	65	63.10
July 2013	110	60	54.54
August 2013	98	25	25.51
September 2013	114	39	34.21
October 2013	50	10	20.10
November 2013	72	25	34.72
December 2013	60	13	27.66
January 2014	97	17	17.52
February 2014	35	05	14.28
March 2014	55	05	09.09
April 2014	30	02	06.66
May 2014	45	04	08.88

Table No.1: Showing the percentage prevalence of chicken Coccidiosis in Gangapur tehsil during June 2013 – May 2014

Month wise analysis in Vaijapur showed that maximum prevalence was during June (60.90%), followed by Aug, July, Sep, Dec, Oct, Nov, Jan, Apr, Mar, Feb, and May (57.14%, 46.66%, 31.37%, 19.51%, 17.14%, 16.66%, 15.00%, 14.28%, 12.00%, 08.10%, and 07.84%). (Table No.2)

Period	No. of Samples		% Prevalence
	No. of Sample Examined	No. of Sample Positive	
June 2013	110	67	60.90
July 2013	90	42	46.66
August 2013	105	60	57.14
September 2013	102	32	31.37
October 2013	70	12	17.14
November 2013	60	10	16.66
December 2013	82	16	19.51
January 2014	80	12	15.00
February 2014	37	03	08.10
March 2014	50	06	12.00
April 2014	35	05	14.28
May 2014	51	04	07.84

Table No.2: Showing the percentage prevalence of chicken Coccidiosis in Vaijapur tehsil during June 2013 – May 2014

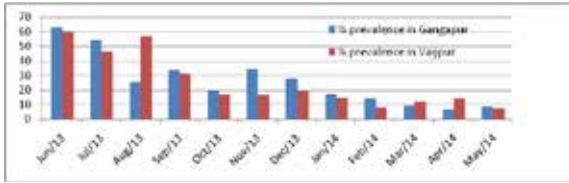


Fig. No.1:Showing the percentage prevalence of chicken Coccidiosis in Gangapur and Vaijapur tehsil during June 2013 – May2014.

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