

Minor Research Project

Final Report on

**“Study of Chicken Coccidiosis to Boost Poultry
Production in Gangapur and Vaijapur Tehsil of
Aurangabad District”**

Submitted To



University Grants Commission

Western Regional Office

Ganeshkhind, Pune - 411007.

By

Dr. Bhimrao N. Jadhav

Principal Investigator

Department of Zoology,

Shri Muktanand College, Gangapur,

Dist. Aurangabad M.S.

July 2015

Report of the work done

- 1) Survey of references regarding research work from books and various National and International journals with the help of various sources.
- 2) Survey of poultry farms in study areas i.e. from Gangapur and Vaijapur tehsil Local poultry farms,
- 3) Collection of samples from different poultry farm and brought to the laboratory for further investigation.
- 4) Further studies of samples in the laboratory and collection of oocysts from the infected samples done.
- 5) 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 was 31.07% and 30.84% respectively. Comparative study shows minor differences in prevalence.
- 6) Observation and identification of oocysts was done, During the course of present investigation, an extensive survey was carried out to record the incidence of coccidia in broiler chicken. The present study showed that the broiler from Gangapur and Vaijapur Tehsil of Aurangabad District in Maharashtra harboured 07 species of Eimeria. The species occurring in broiler chicken were as follows: -*Eimeria tenella* Railliet and Lucet 1891, *Eimeria necatrix* Johnson, 1930, *Eimeria brunetti* Levine 1942, *Eimeria acervulina* Tyzzer 1929, *Eimeria praecox* Johnson 1930, *Eimeria maxima* Tyzzer 1929, *Eimeria mitis* Tyzzer 1929.

Summary of findings

- 1) 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.
- 2) 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%, 4.21%, 34.72%, 27.66%, 25.51%, 20.10% 17.52%, 14.28%, 09.09%, 08.88%, and 06.66%).
- 3) 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%).
- 4) Comparative study showed that maximum prevalence was in Gangapur (36.07%) than Vaijapur (35.90%).
- 5) During these two seasons large number of oocysts were collected and identification of oocysts was done, during the course of present investigation, an extensive survey was carried out to record the incidence of coccidia in broiler chicken The present study showed that the broiler from Gangapur and Vaijapur Tehsil of Aurangabad District in Maharashtra harboured 07 species of *Eimeria*. The species occurring in broiler chicken are as follows:- *Eimeria tenella* Railliet and Lucet 1891, *Eimeria necatrix* Johnson, 1930, *Eimeria brunetti* Levine 1942, *Eimeria acervulina* Tyzzer 1929, *Eimeria praecox* Johnson 1930, *Eimeria maxima* Tyzzer 1929, *Eimeria mitis* Tyzzer 1929.

Three Research Papers Are Published:

Sr. No.	Title of research paper	International / National	Name of journal/ book	Year and issue no.	No. of Authors	ISSN /ISBN NO.	Whether you are first or any more
1	Study Of Seasonal Incidence Of Chicken Coccidiosis In Gangapur And Vaijapur Tehsil Of Aurangabad District In Maharashtra	International	International Journal Of Applied Science-Research And Review	IJAS [1][3] [2014] 093-097	02	ISSN: 2394-9988	01
2	Comparative Study Of Seasonal Incidence Of Chicken Coccidia In Gangapur And Vaijapur Tehsil Of Aurangabad District In Maharashtra	International	Global Journal For Research Analysis	Volume-4, Issue-7, July-2015 •	01	ISSN No 2277 - 8160	01
3	Coccidia – A Historical Perspective		Recent Trends In Zoology: A Compilation Of Research Articles	Sept.2014	02	ISBN - 978-93-84916-68-8	01