

# Seasonal Incidence of Coccidiosis from Ruminants of Aurangabad (M.S.)

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**Abstract:** During a period of twelve months, i.e. from June 2021 to May 2022, 1363 ruminants' samples were examined for coccidial infections, out of which 248 samples were positive, the percentage of prevalence being 18.19%.

**Keywords:** Coccidial infection, ruminants

## I. INTRODUCTION

Several species of coccidia cause extensive pathological damage and mortality in cattle, poultry, pig, sheep, goats and other domestic animals. For this reason coccidia have fascinated an attention of many workers. The studies of ultrastructure of coccidia have enhanced this group's biological, medical and veterinary importance; hence this study was initiated to record the prevalence of coccidia in ruminants of this region.

## II. MATERIAL AND METHODS

The samples of ruminants like goat and sheep were obtained from various slaughter houses in and around Aurangabad district (M.S.) for bovine coccidiosis fecal matter were obtained from the study area. The fecal smear of ruminants were examined and processed within 4-5 hours after collection. Smears were examined for the presence of oocysts after sieving and centrifugation at 3000 rpm for 10 min. The oocysts were placed in cavity blocks containing potassium dichromate solution for sporulation.

## III. RESULTS AND DISCUSSION

During the present study comparative analysis has been made of the prevalence of coccidia in ruminants. The study was based on sample collected from various localities in and around of Aurangabad district of Maharashtra State during a period of one year i.e. from June 2021 to May 2022.

During a period of twelve months (June 2021 to May 2022) 1363 samples were examined for coccidial infection, out of this 248 samples were found to be positive, the prevalence being about 18.19%. A monthwise analysis of the 12 months prevalence showed that maximum prevalence was during August, [27.69%] followed by [September, October, June, November, July, December, January, February [26.84%, 23.87%, 21.34%, 20.47%, 18.33%, 16.18%, 14.00%, 10.80%, respectively]. the lower prevalence was during March, April and May [08.88%, 08.86%, 06.56%]. The pattern suggested that the peak is in the mid of monsoon up to the starting of winter. The prevalence is gradually reduces after the mid of winter and reaches low with onset of summer.

**Table 1:** Prevalence of incidence of coccidia in ruminants of Aurangabad (M.S.) during monsoon season (June 2021 to Sep 2021)

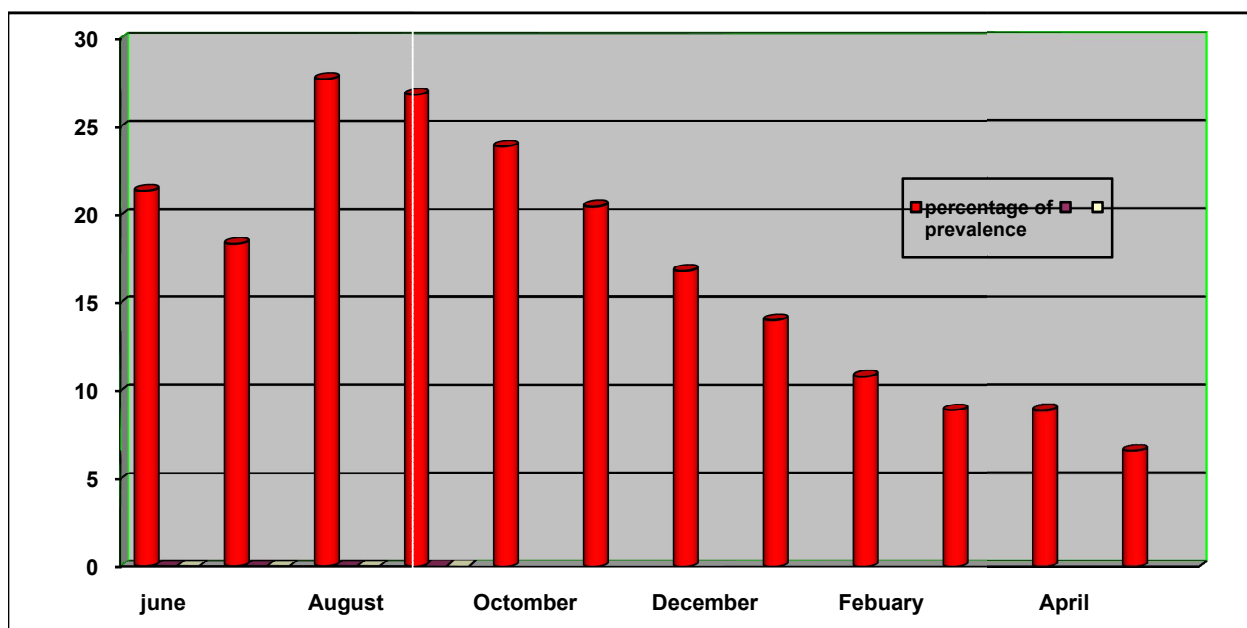
S/No	Period	No of Samples Examined	Number of Sample Positive	Percentage Prevalence
1.	June	89	19	21.34%
2.	July	120	22	18.33%
3.	August	130	36	27.69%
4.	September	149	40	26.84%

**Table 2:** Prevalence of incidence of coccidia in ruminants of Aurangabad (M.S.) during winter season (Oct 2021 to Jan 2022)

S/No	Period	No of Samples Examined	Number of Sample Positive	Percentage Prevalence
5.	October	155	37	23.87%
6.	November	127	26	20.47%
7.	December	125	21	16.8%
8.	January	100	14	14.00%

**Table 3:** Prevalence of incidence of coccidia in ruminants of Aurangabad (M.S.) during summer season (Feb 2022 to May 2022)

S/No	Period	No of Samples Examined	Number of Sample Positive	Percentage Prevalence
9.	February	111	12	10.80%
10.	March	102	09	8.88%
11.	April	79	07	08.86%
12.	May	76	05	06.57%



**Figure:** Month wise prevalence of coccidia in ruminants of Aurangabad (M.S.) during June 2021 to May 2022

**ACKNOWLEDGEMENT**

The authors are grateful to the Principal Maulana Azad College Aurangabad for his kind cooperation encouragement and facilities extended to us.

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