

PRESENT STATUS OF COCCIDIOSIS IN BROILER CHICKEN OF KASHMIR VALLEY

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ABSTRACT: The present study aimed at epidemiological investigation of coccidian parasites of broiler chicken reared across the Kashmir Valley. Intestinal ailments are an imperative alarm to the poultry industry and coccidiosis is causing a considerable economic trouble to poultry farmers throughout the world. The current study was planned to determine the seasonal prevalence of coccidiosis, identification and comparative prevalence of different *Eimeria* species. 780 faecal samples of broiler chicken (litter droppings) were collected from June 2018 to May 2019 for the detection of different *Eimeria* spp. from the different districts of the Kashmir Valley. Five different *Eimeria* spp. viz. *Eimeria tenella* (20.12%), *Eimeria acervulina* (11.92%), *Eimeria maxima* (10.25%), *Eimeria necatrix* (8.84%) and *Eimeria mitis* (2.69%) were isolated from 293/780 (37.56%) faecal samples. It was also observed that highest prevalence of coccidiosis was found throughout the autumn 49.7% (odds ratio=3.522, 95% CI =2.27-5.462, p-value<0.001) followed by summer 43.8% (odds ratio = 2.771, 95% CI = 1.77-4.32, p-value<0.001) and spring 35.1% (odds ratio= 1.928, 95% CI =1.236-3.009, p-value<0.004), while lowest value was observed in the month of winter 21.9%. Moreover, it was also observed that prevalence of coccidian infection was found to be eminent in broiler chicken having 3-4 weeks of age followed by those having 4-6 weeks of age and less in broiler chicken having 1-2 weeks of age and was 67.23%, 23.54% and 9.21% respectively.

KEY WORDS: Poultry, coccidiosis, *Eimeria*, prevalence, Kashmir Valley

Animal Husbandry including dairy and poultry activities continues to be an integral part of human life in most of the rural population in India. The country has huge resources of livestock and poultry, which play an imperative function in improving the socio economic circumstances of rural masses. The overall contribution of livestock segment in total GDP was virtually 4.4% throughout 2015-2016 (Economic Survey, Department of Economic Affairs, Ministry of Finance, GOI, 2015-2016). The development in this sector is attributed not only to the fact of increasing production of milk, meat, wool and eggs but also overall progress of livestock by controlling diseases, progeny development and related infrastructure. The poultry industry has the potential of rapidly developing from small scale to large scale production units. In Jammu and Kashmir despite of the