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EFFICACY OF GINGER (*ZINGIBER OFFICINALE*) AGAINST EXPERIMENTALLY INDUCED COCCIDIOSIS IN BROILER CHICKEN REARED ACROSS THE KASHMIR VALLEY

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ABSTRACT: The present work was carried out to assess the anticoccidial efficacy of ginger (*Zingiber officinale*) in comparison to a reference drug Amprolium against experimentally induced *Eimeria* species infection in broiler chicken reared across the Kashmir Valley. However, rhizomes of ginger are effective alternatives to coccidiostats but their use has not been accurately recognized. For this purpose, one day old broiler chicks were procured from a local market and were randomly divided into 4 groups (Group A to Group D). All the groups except Group D were infected orally with 10000 viable sporulated oocysts of mixed *Eimeria* species. Group A was infected and treated with ginger powder at the dose rate of 5 g/L of drinking water, Group B was infected and treated with Amprolium powder at the dose rate of 1.25 g/L of drinking water, Group C (+ve control) was kept as infected and untreated group and Group D was kept as uninfected & untreated group. Faecal samples were collected on "0" day before treatment and on 7th, 10th, 14th and 21st day after starting treatment. Both the treatments resulted in decreased clinical signs, lesion score and faecal OPG counts post-treatment as compared to before treatment. The maximum efficacy of ginger@5g/liter of drinking water was observed on day 21 as 97.61% which was comparable to the efficacy of a standard anticoccidial drug amprolium on the same day as 99.23%, after starting treatment. Ginger@5g/liter of drinking water showed a significant difference of efficacy on day 7 with all other days (P<0.05). It was concluded that ginger was effective and showed efficacy comparable to a standard anticoccidial drug amprolium in the treatment and control of coccidiosis.

KEY WORDS: *Zingiber officinale, Eimeria*, Efficacy, Broiler chicken, Kashmir

India has a huge resource of livestock and poultry, which play an imperative function in improving the socio-economic circumstances of rural masses. Parasitism is one of the primary hindrances to livestock rearing resulting in vast economic losses during mortality, morbidity, reduced feed conversion ratio, ineffectiveness of production and by means of costs acquired upon their treatment and control (Shahardar, 2013). Among the parasitic diseases, coccidiosis is a disease of major economic importance in poultry industry (Blake