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## USE OF HERBAL PRODUCTS AGAINST POULTRY COCCIDIOSIS: AN ALTERNATIVE TO CHEMICAL COCCIDIOSTATS

| Yasmeena Jan\* | Syed Tanveer\* |  
| Rafiq Ahmad Shahardar\*\* | Bilal Ahmad Para\*\*\* |

\* Department of Zoology, University of Kashmir, INDIA. E-mails: yasmeena.yasin56@gmail.com, syedtnvr@gmail.com, ORCID IDs: 0000-0002-9355-9123 and 0000-0002-9671-1442

\*\* Faculty of Veterinary Sciences, SK University of Agriculture Science and Technology, Shuhama, Srinagar, Kashmir, INDIA. E-mail: rafiqshahardar@gmail.com, ORCID ID: 0000-0002-5719-5991

\*\*\* Department of Mathematical Sciences, Islamic University of Science and Technology, Awantipora, J&K, INDIA. E-mail: parabilal@gmail.com, ORCID ID: 0000-0002-0077-3391

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**ABSTRACT:** Coccidiosis is the scourge of poultry industry resulting in great economic losses due to its high mortality and morbidity in affected flocks. To overcome these losses, enormous amount of money is being spent worldwide, but no efficient results have been obtained yet. The traditional method for the prevention of this disease in poultry is the inclusion of coccidiostats (anticoccidial chemicals) into their feed or water, but this method has a disadvantage of accumulation of residues in poultry meat and development of drug resistance in coccidian parasites. Modern poultry researchers and nutritionists are looking for safe alternative methods to replace the use of coccidiostats in poultry production. The best solution to all these problems could be the use of herbal plants which are budding as a safe alternative to chemical coccidiostats. Many herbal plants have been evaluated for their anticoccidial activity among which *Artemisia annua* (sweet wormwood), *Azadirachta indica* (neem), *Curcuma longa* (turmeric), *Zingiber officinale* (ginger), *Allium sativum* (garlic), medicinal mushrooms like *Ganoderma applanatum* (artist's bracket) and *Fomes fomentarius* (hoof fungus) etc are worth to mention for their good efficacy against this dreaded disease. Keeping in view this background information, an attempt is made to compile all the available information regarding the efficacy of various herbal plants against poultry coccidiosis along with their biological properties.

**KEY WORDS:** Coccidiosis, coccidiostats, herbal plants, poultry, *Eimeria*

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Coccidiosis is recognized as one of the major protozoan disease affecting the poultry industry worldwide which is caused by single-celled apicomplexan parasites belonging to genus *Eimeria* having different species (Chapman, 2014). The founder of contemporary coccidiology (Tyzzer et al., 1932) worked on the parasite morphology and life cycle of coccidia in different hosts and described nine species of *Eimeria* in poultry however, only seven (*E. acervulina*, *E. tenella*, *E. maxima*, *E. brunetti*, *E. mitis*, *E. necatrix*, and *E. praecox*) are considered to be economically important in intensive poultry production and each species has its own characteristics according to site of infection, immunogenicity and pathogenicity. All spp. of *Eimeria* cause intestinal coccidiosis resulting in