

Haemato-biochemical Impact of Gastrointestinal Nematodosis after Anthelmintic Treatment in Muzaffarnagri Sheep

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Abstract—*Small ruminants are precious renewable resource in India as well as round the globe since inception of human civilization. Nematodosis causes loss of plasma proteins in gastrointestinal tract of small ruminants which ultimately leads to alteration in protein metabolism, decreased activity of certain enzymes and low levels of minerals. A study was conducted on naturally infected flock of 15 sheep, for estimation of haemato-biochemical alterations following anthelmintic treatment. Animals were randomly divided into three groups of five animals (GI, GII and GIII). GI animals were treated with levamisole (@ 7.5mg/kg b. wt.) and GII with fenbendazole (@ 5mg/kg b. wt) while GIII group was kept as infected untreated control. The estimation of EPG and blood serum profile of individual groups were also performed before and after 15th days post treatment. A significant increase ($P < 5\%$) was noted in haemoglobin, PCV, TLC, serum-albumin, sodium potassium and chloride level while non significant increment in TEC, total protein and globulin was seen in treated groups. On the other hand in untreated group, a significant decrease was noticed in all these parameters between “0” and 15th day of post treatment. The results showed that the haematological and biochemical parameters of sheep were restored towards normal value after anthelmintic treatment.*