



RESEARCH PAPER

Studies on haematological changes in GI nematodes in cattle and buffalo in Udaipur, district (Rajasthan)

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Abstract : A study on prevalence of for gastrointestinal nematode in the infected and non-infected cattle and buffalo of Udaipur district (Rajasthan) from Sept. 2020 to January 2021 by haematological parameters such as haemoglobin (Hb), packed cell volume (PCV), erythrocyte sedimentation rate (ESR), total leucocyte Count (TLC) and differential leucocyte count (DLC). The highly significant decrease in haemoglobin concentration in nematode infected and non-infected buffalo (8.65 ± 0.2335 and 10.12 ± 0.1077) and (8.63 ± 0.2886 and 09.84 ± 0.1411) in infected and in non-infected cattle, respectively. The packed cell volume showed highly significant decrease in nematode infected and non-infected buffalo (28.98 ± 0.2101 and 32.94 ± 0.2477) and (27.64 ± 0.5337 and 30.65 ± 0.3956) in infected and non-infected cattle, respectively. The highly significant decrease in erythrocyte sedimentation rate in nematode infected and non-infected buffalo (0.80 ± 0.0245 and 1.00 ± 0.0167) and in cattle was found to be in infected (0.63 ± 0.0287) and in non-infected (0.97 ± 0.0240), respectively. Total leukocyte count (TLC) value significant increase for infected and non-infected buffalo and cattle buffalo (8.53 ± 0.2784 and 10.45 ± 0.2538) and (8.36 ± 0.2582 and 10.49 ± 0.1689), respectively. In the infected buffalo neutrophils (32.96 ± 0.3084), eosinophils (5.50 ± 0.2049), Basophils (0), lymphocytes (62.36 ± 0.2948) and monocytes (5.48 ± 0.1831). However, in non-infected buffalo neutrophils (37.21 ± 0.3701), eosinophils (4.60 ± 0.2196), basophils (0), lymphocytes (57.21 ± 0.2802) and monocytes (4.99 ± 0.2094). Whereas, in infected cattle neutrophils (28.02 ± 0.2914), eosinophils (5.74 ± 0.1942), basophils (0), lymphocytes (67.48 ± 0.2979) and monocytes (5.57 ± 0.1547). However, in non-infected cattle neutrophils (32.15 ± 0.3088), eosinophils (3.88 ± 0.1836), basophils (0), lymphocytes (61.59 ± 0.3475) and monocytes (5.23 ± 0.1832). There is reduction in haemoglobin, packed cell volume and ESR in the GI nematode infected cattle and buffalo. In total leukocyte count in buffalo and cattle lymphocytes, eosinophils and monocytes showed increased in infected group.

Key Words : Haematological changes, InGi nematodes, Cattle, Buffalo

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