RESEARCH ARTICLE

IMPACT OF GRAZING ON SOIL ATTRIBUTES IN A PART OF NANDA DEVI BIOSPHERE RESERVE, UTTARAKHAND, INDIA

Vijay Kumar Yadav*[1], D.S. Chauhan[1], P.S. Chauhan[2] and Rathiesh P.[1]

[1]HNB Garhwal University (A Central University), Srinagar-Garhwal, Uttarakhand, 246174, India.
[2]College of Horticulture and Forestry, Agriculture University, Kota, Jhalrapatan, Rajasthan, 326023, India.
Email: yadavvijaykumar3@gmail.com

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Abstract: Livestock is one of the main cause has different effects on different parts of range ecosystem. An effective factor is the number of livestock when it is beyond the capacity of the rangeland and it has different effects on soil and plants with different intensities of grazing. This studies measured short-term effects of grazing on soil attributes in sub-alpine rangelands in a part of Nanda Devi Biosphere Reserve (NDBR). To study the effect of grazing impact on soil attributes such as the P, K, organic carbon and pH in the three sites of NDBR; Toli Laga Chiae (Less Grazed), Salud Dugra (Medium Grazed) and the Tapovan (Heavy Grazed) systematic random soil sampling was conducted at 0-20 cm depth and nine samples were collected per site. The result was compared with the all sites. Result revealed that elements such as phosphorus and potassium in the heavy grazed site are more than the less grazed site. However, Organic carbon is more in less grazed site but it's significantly differs from all the sites. One way Anova was used to analyze the variance.

Keyword: Ecosystem, Grazing, Biosphere reserve, Soil

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*Corresponding Author

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