

Abstract

Grazing meadows by livestock may directly or indirectly cause some changes in the soil qualities and finally can influence ecosystem structure or species composition of grassland ecosystems that can create some changes in vegetation diversity (Raeisi et al, 2012). Grazing of livestock directly or indirectly affects on vegetation structure and diversity. These effects can be evaluated by protection on the surface of grasslands. This study was conducted to examine the effect of protection and grazing on some meadow vegetation indexes in two levels of protection (about 10 years) and non-protection (the area with less grazing) in a part of grassland of Joon Abad-Zahedan. The data about vegetation in 10 sm (square meter) plats of each area were collected randomly and systematic. The percentage factors of organic carbon and its reserving, total nitrogen and its reserving, Acidity(PH) and the electrical conductivity were measured, too. The results showed that less grazing increased the rate of reservation in organic carbon, organic nitrogen and special mass in soil appearance, but the value of soil acidity had been decreased. Therefore, there was no significant change in organic carbon and the electrical conductivity quality. The findings of the study shows that species diversity based on Shanon-viner index, richness based on Manhinic index and the homogeneity based on Pailo index in non-protection area, in other word, the area with less grazing were more than protection area. So, it can be indicated that the least grazing increases species diversity.

Key word: Species richness, Species diversity, Physical and chemical properties of soil, Grassland of JoonAbad



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**The Impact of Long-term Grazing Exclusion and
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Characteristics, Soil Carbon Pool and Nitrogen Pool in
Joonabad Rangeland-Zahedan**

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