Abstract

Since industrial revolution in nineteenth century and increasingly evolution of human, occur variety of changes in man's life. Human need to Energy and consumption of different fossil fuels such as coal, oil and natural gas due to increasingly growth in gases such as carbon dioxide in atmosphere. Among current methods, development and expansion of vegetation tree woody, shrub and bush method, were used more that other methods now effectively for decreasing carbon dioxide in atmosphere. The rangelands ecosystems have approximately half of the worlds land area and they store over third of terrestrial biosphere carbon. result in this lands have too capability for carbon sequestration. Fasham rangelands are no exception. In this study has done in Fasham Rangelands. After primary identification and definition range of survey region, in order to study of transitive's vegetation variables, Used by random-systematic sampling used to select study sample. Then was accounted the amount of biomass plant and organic carbon in variation plants organs. Finally by primary Weight and amount of organic carbon, account reduction coefficient for above ground and underground organs and by multiply to primary Weight above and underground organs, accounted carbon sequestration. After gathering the crude date, used one way ANOVA for comparison weight plant biomass and carbon sequestration plant in enclosure and grazing region. Also comparison carbon sequestration and weight plant biomass between enclosure and grazing treatment done by independent samples t-test. Results comparison of means carbon sequestration amount in grazed rangeland explanatory existence meaningful differences in 1% level between carbon sequestrations by species extant in this region. In enclosure rangeland exist meaningful differences in level 5% between carbon sequestration species. Results comparison plant biomass for survey species in grazed rangeland in this sample species biomass in enclosure Subsidiary is this subject the between amount of carbon sequestration this species in grazed and enclosure not meaningful variation in level 5% but meaningful in level 10%. Finally practically because soft grazing, carbon sequestration in enclosure (136/366 kg/ha) more than grazed (157/127) region. Also practically amount of carbon sequestration in underground organ more than above ground.

Key words: Carbon sequestration, Enclosure, Plant biomass, Grazing management.

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