

Comments to the Author

Ecological stoichiometric ratio is an important index to reveal the response of plant species to environmental disturbance. As described in the manuscript, the study of the effect of rodent disturbance on the stoichiometric ratio of plant ecology is helpful to further evaluate the effect of rodent disturbance on the mechanism construction of plant growth and development. In this manuscript, *H. ammodendron*, a dominant plant and a typical rodent in Gurbantungut desert, was selected as the research object. The biomass, net photosynthetic rate, and nutrient contents in soil around roots and assimilated branches of *H. ammodendron* were determined to investigate the effects of the disturbance of *H. ammodendron* on the biomass, ecological stoichiometric ratio and nutrient uptake and utilization of *H. ammodendron* at different growth stages. It reveals that after the interference of the gerbils, the absorption of TN by *H. ammodendron* in each long stage decreased but the absorption of TK increased, and the influence of great gerbils on *H. ammodendron* decreased the photosynthetic nitrogen and photosynthetic phosphorus utilization of *H. ammodendron*. This manuscript reveals the effect of the disturbance of the great gerbils on the nutrient absorption and utilization of *H. ammodendron*, and lays a foundation for the future study of the coexistence mechanism of the great gerbils and *H. ammodendron*. The manuscript is rich in content and reveals the influence of gerbil disturbance on nutrient absorption and utilization of *H. ammodendron*, which has novelty and practical significance. This manuscript can be accepted for publication. Some suggestions need to be revised as follows:

In line 16: The *H. ammodendron* abbreviation needs to complete the full name

In line 113-114: How to divide the different growth stages of *H. ammodendron*, Suggest further describe it in further detail.

In line 136-138: The description of sample collection and processing is not detailed and will be rewritten in further detail.

In line 64-66: Propose to reduce “Soil ecological stoichiometric characteristics between soil carbon (C), nitrogen (N) and phosphorus (P).”

In line 269-275: Propose to rewrite “As one of the main rodents in the southern margin.....thus affecting the growth and distribution of other plant populations.” to make it more fluent.

In line 351-352: Propose to reduce “P is an important nutrient element that limits the primary productivity of vegetation in terrestrial ecosystems.” and merge with the previous paragraph.