

B. N. Nasyev,¹ I. G. Manolov², A. K. Bekkaliyev¹¹ Zhangir Khan West Kazakhstan Agrarian - Technical University, Uralsk, Kazakhstan;² Agrarian University Plovdiv, Republic of Bulgaria.E-mail: veivit66@mail.ru, manolov_ig@yahoo.com, bekkaliyev_askhat@mail.ru**CHANGE OF PHOSPHORUM AND EXCHANGE SODIUM CONDITIONS
OF CHESTNESS SOILS UNDER THE INFLUENCE OF GRAZING**

Abstract. In order to prevent adverse anthropogenic effects on pastures in modern agricultural agriculture, an adaptive strategy for further increasing food production and agricultural raw materials must be based on the principles of environmental management, which includes a number of activities, the most important of which are seasonality of pasture release taking into account the state of vegetation cover and its yield; determination of optimal livestock load per unit area. The research aim is agrochemical assessment of grazing land cover depending on grazing technology. As a result of the carried out studies, the negative influence of intensive grazing of farm animals on the content of mobile forms of phosphorus and exchanged sodium chestnut types of pasture soils of West Kazakhstan region was found. As a result of excessive grazing, the content of moving phosphorus of chestnut soils decreased, the content of exchange sodium increased as part of exchange bases and non-salt soils became a medium degree of salt content. The results of the studies confirmed the existence of a statistical pattern of reduction of mobile phosphorus content and increase of exchange sodium content as grazing intensity increases across all soil types.

Key words: pastures, soil cover, mobile phosphorus, sodium exchange, degradation, grazing.

Introduction. As everywhere else, the problems of combating the degradation of grazing lands and rational use of grazing ecosystems are also relevant for West Kazakhstan. At present in West Kazakhstan region, the area of pastures grassless and overgrown with unseemly and poisonous plants is growing. The area of degraded land in places of waterfall and recreation of animals is particularly large. Grazing failure around villages expanded to 7-9 km. In general, the dynamics of these processes currently allow to predict with a high degree of confidence the expansion of degradation of pastures to 50% of their area.

Unfavorable condition of pastures is not only due to natural characteristics of the region. This is even more the result of anthropogenic influence. Thus, in recent years, in pursuit of profit, agricultural formations, especially farms without taking into account the conditions of grazing lands, have begun to increase the number of farm animals intensively. As a result, this led to a significant increase in grazing load, reduced yield and fodder intensity of grazing lands, and increased desertification in huge areas. Particularly dysfunctional is the condition of sand pastures used before, mainly as winter ones, today they are used in other seasons as well [1,2,3,4,5].

In this regard, agrochemical monitoring of grazing ecosystems to identify grazing-induced animal processes is relevant. At the same time, agrochemical surveys of grazing phytocenoses for their rational use become a special priority due to the new tasks set for livestock farmers of the country to increase export capacity for the supply of quality domestic meat [6,7,8,9].

Research methods. The research is carried out in Zhangir Khan WKATU within the framework of the program-targeted financing of the Ministry of Agriculture of Kazakhstan on the topic BR 06249365 "Creation of highly productive grazing lands in the conditions of North and West Kazakhstan and their rational use" and on the topic of PhD thesis "Agrochemical assessment of indicator changes in the soil cover of WKO pastures depending on grazing technology".