

STUDY THE PRODUCTIVITY OF RANGELAND PLANTED WITH ATRIPLEX HALIMUS SHRUBS IN THE NORTHERN BADIA OF JORDAN

YAHYA ABDEL RAHMAN AL-SATARI¹, MOHAMAD OKLAH ABU DALBOUH², AYED ABDEL RAZZAG AL-OMARI³ & IBRAHIM 'MOHAMMAD SAEID' AMAYREH⁴

¹Rangeland and Forestry Research Directorate, National Centre for Agricultural Research and Extension

NCARE, Jordan

²⁴Water and Ecology Research Directorate, NCARE, Jordan ³Rangeland Expert, Faculty of Agriculture, Mu'tah University, Jordan

ABSTRACT

The Jordanian rangeland was subjected to severe degradation due to drought and man misuse with the result of limited feed resources for livestock and desertification process. Fodder shrubs were used for rangeland restoration. The present experiment was conducted at Khanasri, Mansheit Bani Hassan and Breqa to study production of planted fodder shrubs and their effect in increasing rangeland productivity and stocking rate. Productivity of native vegetation and *Atriplex halimus* shrubs was estimated. High significant differences had noticed of native vegetation cover percentage and productivity between locations. Breqa showed the highest in coverage percentage, fresh and dry yield. However, Khanasri and Breqa indicated highest in the survival percentage, fresh, browse and dry yield of the *Atriplex* shrubs in comparison with Manshia. The total productivity of Breqa recorded elevated fresh dry, allowable yield and stocking rate in comparison with Khanasri and Manshia. The stocking rate of Breqa was 250% and 167% more than those of Khanasri and Manshia, respectively. *Atriplex* shrubs showed increase in the total productivity by 29%, 8% and 6% for Khanasri, Breqa and Manshia, respectively. It is recommended to plant *Atriplex* shrubs to improve rangeland productivity and stocking rate.

KEYWORDS: Atriplex Halimus, Fodder Shrubs, Rangeland Productivity, Stocking Rate

