THE FERTILIZATION EFFECT UPON THE PRODUCTIVITY OF SOME PERMANENT MEADOWS FROM THE MOUNTAIN AREA OF SLĂNIC-BUZĂU HYDROGRAPHIC BASIN

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SUMMARY

The fertilization with mineral and organic fertilizers have a positive influence upon the productivity of permanent meadows, crop level being different, function of fertilizer type, its doses and combinations.

The experience was organized on an Agrostis capillaris – Festuca rubra, permanent meadow situated in the mountain area of Slănic-Buzau river basin, in working point Lopătari. The experience was monofactorial, organized after randomized blocks method with 7 variants: V1 – unfertilized witness, V2 - N64P36, V3 - N128P72, V4 - N64P36K40, V5-N128P72K40, V6 – Vinassa Rompak 4t/ha + P36, V7 - Vinassa Rompak 6t/ha + P72. Chemical fertilizers and Vinassa Rompak, were spread in spring; chemical fertilizers in solid state and Vinassa Rompak as dilution with water at 1:5 rate. The meadow was used as hay.

During the research period the Agrostis capillaris – Festuca rubra, permanent meadow had a positive answer to the NPK type mineral fertilizers and also at Vinassa Rompak fertilizer with crop increases statistical assured and an improvement of the vegetation state of all species. In year 2002, crops reached variations between 2.58 t/ha d.m. and 4.82 t/ha d.m. (V1 – witness variant, V7 – Vinassa Rompak 6t/ha + P72 respectively). In years 2003 and 2004, the reached crops were smaller than in 2002, due to less favorable climatic conditions, but the used fertilizers increases the crop face to witness variant with values between 45% and 82% in 2003, 40 %and 74 % in 2004 respectively. By analyzing the average crops obtained in three years of researches we notice that the used fertilizers had a positive influence upon Agrostis capillaris – Festuca rubra, permanent meadow productivity but in according with the weather. The increases of crop face to witness variant were between 40 % and 75 %, the best results being obtained at N128P72K40 (83%) fertilization and at Vinassa Rompak 6t/ha + P72 (75%) fertilization.

BIBLIOGRAPHY