LONG TERM EFFECT OF IMPROVEMENT METHODS ON SUBALPINE DEGRADED

Nardus stricta L. GRASSLANDS

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Abstract. Researches have been carried out at the Research Station for Mountain Grasslands from Blana, Bucegi, located at 1.800 m altitude (subalpine floor) in order to determine the effect of different improvement methods on degraded Nardus stricta grasslands. With the dry matter yield (DM) there have been made accurate analysis of floristic composition and fodder quality after 19 years since the improvement by different methods. The researches have highlighted the long term effect of improvement methods (organic and chemical fertilisation, reseeding, over-seeding and liming) a subject not so well studied in present time in Romanian Carpathians. The best improvement method was the liming up to 2/3 hydrolytic acidity, over-seeding after harrowing at 1 up to 2 cm deep and organic or organic and chemical fertilisation. In this plot Nardus stricta was replaced by valuable species like Festuca nigrescens, Agrostis capillaris and Poa pratensis. Also the participation of Trifolium repens has grown up to 20-25 %. As a result, the pastoral value increases to 68, the DM yield triples and has a crude protein content of approximately 12 % and a lower fibre and lignin proportion thus increasing the fodder digestibility.

Keywords: floristic composition, improvement methods, *Nardus stricta* grasslands, quality of fodder.

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