

Effect of fertilization on the quantity and quality of the phytomass from *Festuca rubra* pastures

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SUMMARY

Long-term fertilization with chemical and/or organic fertilizers induces changes in the biology of the vegetal cover of the permanent pastures of *Festuca rubra*. In point of the floristic composition changes in the number of species as well as in their proportion of participation in the structure of the phytocoenosis (abundance -dominance) were noticed. The average production of phytomass varied between 1.78- 7.66 t DM/ha. The amendments modified the chemical composition of the phytomass in the experimental variants, increasing the crude protein and fibre levels and decreasing the degree of lignification, higher energy values of 0.93 - 1.09 FU /kg DM being thus obtained. For the mountain pastures of *Festuca rubra* amendments with N 120 P 60 and N 180 P 60 which yielded 357-512 kg DCP and 5046-5782 FU/ha as well as the amendments with 20-40 t organic fertilizer with N 120 and P 60, which yielded 382-575 kg DCP and 5107-6241 FU/ha are recommended.

Keywords: permanent pastures, *Festuca rubra*, fertilizers, phytomass