

The influence of organic and organomineral fertilization on biodiversity of the Festuca Rubra meadows in Apuseni Mountains

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The introduction of technological inputs to meadow ecosystems triggers significant changes in the sward. The mineral and organic fertilisers modify the biodiversity of grasslands. In this paper we present the effect of organic and mineral fertilisation on the biodiversity of a Festuca rubra meadow. The experimental field was located in Apuseni Mountains, Romania, at an altitude of 1150 m, an annual rainfall of 1200 mm/year and an annual average temperature of 4°C.

Two experiments were done where different amounts of organic fertilisers and mineral fertilizers were applied. Thus, agricultural use significantly influences the biodiversity of Festuca rubra meadows, determining major changes in the sward by increasing proportion of cover of some species, by reducing the cover of others and by causing the disappearance of some species from the sward.