



## Contributions to the improvement of the permanent grasslands from the boreal floor of the Calimani mountains

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The permanent grasslands from the boreal floor, spread in the middle and upper part of the Călimani Mountains, occupy wide surfaces and produce 6 – 7 t ha<sup>-1</sup> green mass. These grasslands present economical and ecological importance, serve multiple purposes, represent habitat and food source for animals, assure the biodiversity for many plant species, protect the soil against erosion, bring a noble feature and beauty to the environment. The organized experiment pursued, during 2007 – 2009, the increase of the productive potential by fertilization with cattle manure 20 – 40 t ha<sup>-1</sup> and the improvement of the floristic structure and composition. The fertilization lead to the increase of the average production from 1.60 t ha<sup>-1</sup> D.M. for the untreated control up to 2.87 – 3.02 t ha<sup>-1</sup> D.M for the variants fertilized with 30 t ha<sup>-1</sup> manure applied annually and every second year. The grassland's floristic structure improved, after three years of fertilization, meaning that the leguminous species' participation increased from 4 % to 25 – 30 % for the application of 30 t/ha manure every second year and annually.