The organic-mineral fertilization of a Festuca Rubra l. grassland for eight years

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The organic-mineral fertilization could be a realistic method of management of the grasslands while a strong decreasing of animals number takes place in Romania. On the grasslands in Apuseni Mountains, this type is not being practiced, but it could be a chance to maintain the oligotrophic grasslands in the mountainous landscape. The combined and long effect of organic and mineral fertilizers upon the dry matter is rather known, but the influence upon the phyto-diversity is less studied. This papers’ objective is to survey the effect of organic and mineral fertilizers application upon the phyto-diversity of a meadow from the boreal floor. After an eight years period, the administration of mineral and organic fertilizers produces important changes at herbaceous canopy level, two floristic structures being distinguished: on the one side the witness’ one, and, on the other side, the floristic structure of the treated variants, noticing certain species characteristic to each type of management. The floristic structure of the treated variants is significantly correlated with the general cover, mineral and organic fertilization and with the fertilization length. The administration of technological inputs produces a considerable decrease of the phyto-diversity, especially in case of the variants treated with larger quantities of fertilizers.