

## INFLUENCE OF ORGANIC FERTILIZATION ON PHYTODIVERSITY OF A *FESTUCA VALESIACA* SCHLEICH. GRASSLAND

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### Abstract

The application of organic fertilizers for extended period of time has determined a high biodiversity of the investigated grassland. The objective of this study is to determine the effect of sheep and cattle manure application on grassland and the effect on phytodiversity of a *Festuca valesiaca* Schleich. Type association. A high similarity appears by comparing the phytocenosis from V8 fertilization variant (30 t/ha cattle manure/3 year basis) and that of V9 fertilization variant (40 t/ha cattle manure/3 year basis) ( $T = 0.49176925$ ,  $A = -0.05105096$ ), yet differences were not statistically significant. The phytocenosis from unfertilized variant (V1), is largely dominated by grasses or *Poaceae* botanical family, with a dominance of 28% in the sward. Within grasses, the species with the highest Adm value is *Festuca valesiaca* L. 15.5%, followed by *Arrhenatherum elatius* L. 4% and *Dactylis glomerata* L. 1.3%

**Key words:** sheep and cattle manure, phytodiversity, *Festuca valesiaca* Schleich.

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