



## The evolution of *Arnica Montana* l. grasslands depending on the performed management (Apuseni Mountains, Romania)

Ioan ROTAR, F. PĂCURAR, A. STOIE, Nicoleta GÂRDA, Laura DALE - USAMV Cluj-Napoca

In Gârda de Sus commune there is unfolding research concerning the influence of the use system upon *Arnica montana* L. grasslands, more precisely, the manner in which the fertilisation actions are performed and how they influence the sward's composition. The existence of *A. montana* L. meadows is the result of performing a long lasting traditional management of extensive type. These oligotrophic grasslands are only organic fertilised, using mainly the stable manure. The most landowners fertilise the *Arnica* grasslands in a regular cycle: annually most of the times, and rarely once at two or three years. The exploitation only through grazing produces the strong installation of some species like: *Vaccinium myrtillus* L., *Vaccinium vitis-idaea* L., *Luzula luzuloides* Lam., *Deschampsia flexuosa* L. etc. The application of maintenance works and use through mowing favours the spreading of some species with forage value: *Agrostis capillaris* L., *Festuca rubra* L., *Trisetum flavescens* L., *Trifolium pratense* L., etc., as well as some without forage value: *Centaurea pseudophrygia* C.A. Meyer, *Euphrasia officinalis* L., *Gymnadenia conopsea* L., *Hieracium aurantiacum* L. etc. The *Arnica montana* L. populations, from the number of individuals point of view, are poorly influenced by these two systems practicing, being present in both cases with considerable cover.