



# Countertrending local knowledge erosion:

## persistence of traditional cattle healing practices in the Bukovinian Carpathians



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### INTRODUCTION

In many societies, livestock significantly contribute to human food security. However, over the last century in the European context, animal production has been transformed and relocated by the dynamics of centralization and decentralization (Leibler et al. 2009; Karanikolas and Hatzipanteli 2010).

These phenomena have also likely modified the associated veterinary knowledge and practices. In the international literature, ethnoveterinary medicine is an underexplored field in Eastern Europe, but its preservation and implementation are increasingly considered a promising alternative for improving animal health and welfare. In addition, ethnoveterinary knowledge can contribute to local biodiversity conservation (Tabuti et al. 2003; Wanzala et al. 2005).

### OBJECTIVES

We aimed to document the plant-based ethnoveterinary knowledge of Romanians and Hutsuls living in Bukovina, and to analyze possible drivers of ethnoveterinary knowledge persistence/erosion in the Carpathians.

### METHODS

We conducted 125 semi-structured interviews regarding past and present plant-based ethnoveterinary remedies among Hutsuls living in the Carpathian villages of the upper Suceava Valley in Romania and Putyla Rayon in Ukraine and among Romanians living in the pre-Carpathians. This study is part of larger project, DiGe, which collected data also in other three regions of Eastern Europe. We used those 351 interviews for assessing the trajectories of ethnoveterinary knowledge in Bukovina.

### RESULTS & DISCUSSION

Among the seven species encompassed by ethnoveterinary practices cattle is the most represented. Indeed, we documented the use of 22 wild plants and 12 cultivated plants to treat cattle disorders in Bukovina. Most of the reported remedies address problems of the digestive system, particularly diarrhea (for which *Rumex* spp. was the most mentioned), and of the reproductive system, especially as postpartum supplements (e.g. *Linum usitatissimum*). The comparison of these results with the ones of other Eastern European regions reveals a persistence of ethnoveterinary knowledge in Bukovina.

### CONCLUSIONS

Our results indicate that Hutsuls and Romanians living in Bukovina still retain considerable knowledge regarding traditional remedies for treating cattle disorders compared to other Eastern European countries where cattle husbandry almost disappeared (e.g. Kalle and Kaas 2020 in Estonia; Sõukand et al. 2017 in Belarus). Further studies should address contexts of knowledge persistence or recovery to identify the variables underpinning this persistence and thus to design programs of local development that include these knowledge and practices.

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