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MONITORING OF INVASIVE SOLIDAGO SPP. WITH LOW DISTRIBUTION IN PRESOV AREA (EAST SLOVAKIA)

Daniela Gruľová, Štefan Koco, Ruslan Mariychuk

University of Prešov, Prešov, Slovak Republic

Increasing of human transportation all over the world in last century, has led to species exchange between biogeographically separated areas. Non-indigenous species are resistant against natural enemies and their fast spreading could suppress the natural biodiversity and in natural habitats provides an environmental problem in most regions of the world. One of the dangerous species is goldenrod (*Solidago* spp.) which spread fast in east Slovakia. Its huge morphological characteristic have predisposition to treat out the vulnerable indigenous species. Aim of the scientific investigation is pilot monitoring of selected areas where Solidago spp. occurs in low density. Four localities were selected in Presov region - Lachôrka, Šidlovec, Malý Šariš and Chminianská Nová Ves. Geographical and environmental characteristics were described. Number of plants in bunches and number of bunches were counted and their exact positions with GPS were noted. The species monitoring was done using geographical information methods (GIS) to detect the occurrence of goldenrod spots with a high precision. Selected localities present floral diversity with different level of goldenrod dispersal. The results will be used as a starting data for monitoring in next years. The spread and range-expansion will be observed. However, the mechanisms underlying a successful plant invasion are poorly understood, precise scientific investigation could be a step to allows predictions about future spread in selected area.

Keywords: *biodiversity, GIS, goldenrod, invasion dynamics, non-indigenous species*

Corresponding address:
Dr. Ruslan Mariychuk
Department of Ecology
Faculty of Humanities and Natural Sciences
University of Prešov
08116, 17th November str. 1
Prešov, Slovak Republic
Telephone: +421517570312 Fax: +421517725547
E-mail: ruslan.mariychuk@unipo.sk