This work was supported by CNCS-UEFISCDI. Project number PNII-IDEI/WE 4-056/2012

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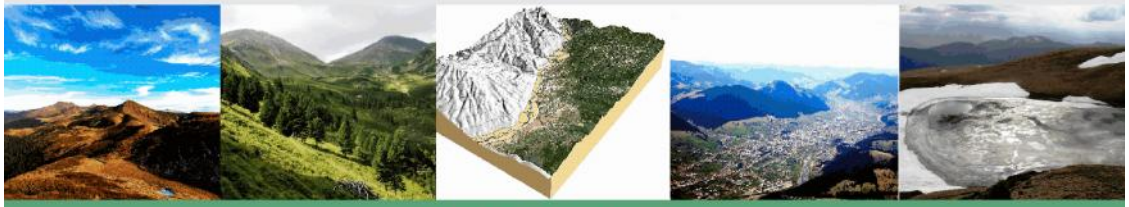

Abstracts volume

INTERDISCIPLINARITY IN GEOSCIENCE IN THE CARPATHIAN BASIN

ISSN 2343-7391 GEOREVIEW
ISSN online 2343-7405

Editor
Marcel Mîndrescu

IGCB

INTERDISCIPLINARITY IN GEOSCIENCE IN THE CARPATHIAN BASIN

Suceava, 19-21 October 2012

Stefan cel Mare University Press
http://georeview.ro www.usv.ro http://uefiscdi.gov.ro

Competitive replacement of the native *Vitis* and *Hedera* taxa by invasive aliens: morphological, cytological and molecular evidences

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We describe here case studies of two woody climber species native to the broadleaf forests of the Carpathian basin. Wild grape (*Vitis sylvestris* C.C.Gmel.), considered to be one of the ancestors of the domesticated grapevine (*Vitis vinifera* L.) became a highly threatened species since the introduction of the American grape species as rootstocks for grapevine. Among these, especially, Riparian grape (*Vitis riparia* Minchx.) escaped from the wine yards and by invading the natural habitats replaced the autochthonous wild grape. In consequence of the competitive exclusion *Vitis sylvestris* suffered a strong withdrawal along its native habitats. 20 morphological traits, including leaf shape and trichome structure were studied to tackle evidence of the introgressive hybridization among the alien and native taxa. Most of the studied Hungarian habitats were already dominated by hybrid specimens of Vitis taxa. Molecular analysis based on 8 nuclear microsatellites markers supported the morphological results.

Based on former references among the native and cultivated ivy species there are diploids and tetraploid specimens. The native *Hedera helix* L. it is considered to be diploid (2n=48), while the cultivated ivy known as Irish ivy, *H. hibernica* (G.Kirchn.) Bean, from Western Europe was considered to be a tetraploid (2n=96) species. Based on our morphological study, among wild spreading specimens of *H. hibernica,* found to invade seminatural habitats of the Carpathian basin there are morphologically distinctive forms that are apart from both *H. helix* and *H. hibernica cult*. By a cytological study among these morphotypes, we could detect diploids, tetraploids and also triploids. Our results suggest that the native, diploid *Hedera helix* is strongly competed by the invasive tetraploid *H. hibernica*. Moreover, in the studied material there are also morphologically distinctive specimens of different citotypes.