

Abstract

The aim of this work is to compare the results of mapping of invasive neophytes in riverbank vegetation of lower Ohře with occurrence of invasive neophytes in riparian vegetation of other 39 mapped watercourses in the Czech Republic. This work also examines influence of selected geographical factors (land use in the riparian zone, biotopes of the riparian vegetation, geomorphology characteristics of the watercourse - slope and stream width, mean altitude, traffic lines, weirs and tributaries) on abundance of invasive species in the riverbank vegetation of the lower Ohře river. More than 86 km part of the riverbank vegetation between Vičice and Terezín was studied. The abundance of 22 taxones the most important invasive neophytes was mapped. The occurrence of invasive neophytes was marked for each of 173 segments (1 segment = 500 m). As the optimal method for surveying abundance of invasive species in the riverbank vegetation modified version of MUTON method has been selected (complex mapping of the orderliness of water flows and flood plains). This method is simple,

time unpretentious and it has actual been used for mapping of other flows in the Czech Republic. The most frequent species in the riverbank vegetation of lower Ohře was found to be *Impatiens glandulifera* and *I. parviflora* and the most numerous was *Helianthus tuberosus* and *Solidago canadensis*, *S. gigantea*.

Key words: alien species, plant invasions, riverbank vegetation, the Ohře river, geographical factors