

## Abstract

### Habitat colonization by the neophyte *Impatiens glandulifera* and factors limiting its distribution

The invasive alien *Impatiens glandulifera* has been present in the flora of The Czech Republic for more than one hundred years. It has colonized banks of all larger rivers and its spread is still in progress. The presence of *Impatiens glandulifera* is mostly reported from associations with nitrophilous dominant species, mainly riparian tall herb and scrub communities.. However, the impact on native vegetation is rather low in these types of invaded habitats. It cannot be distinguished unequivocally, if this alien's preference for riparian habitats is associated with the site conditions or with the specific dynamics of the river, which i) transports the seeds efficiently and ii) creates sites suitable for the invasion of *I. glandulifera* via its flooding regime. The spectrum of habitats further from the river that have been reported to be occupied by this invasive alien seems to be wide (rocks, forest edges and coppice, embankments, wet meadows). Plants tend to be smaller on these sites and generally do not create such dense stands as in riparian habitats, however, they do flower and produce seeds. That is crucial for their further spread. Studies suggest that if *I. glandulifera* changes its site and habitat preferences, its impact on native flora could increase. Although there are factors presumably limiting the spread of the neophyte *Impatiens glandulifera*, such as length of the growing season or the soil nutrient and moisture content, it is clear that potential distribution is still considerably wider than the present state.

Key words: *Impatiens glandulifera*, invasive plants, plant communities, site characteristics, impacts of invasions