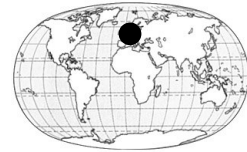


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## WHICH TRAITS MAKE AN ALIEN INVASIVE?

Biological invasions are considered to be one of the major threats to biological diversity. To come up with an effective prevention framework for biological invasions, one of the necessary points is identifying traits which make a plant species invasive. Thus it might be possible to restrict the introduction of species with relevant traits. We analysed the complete naturalised post 1500 alien flora of Germany according to BiolFlor and defined invasions success by (i) the occupancy (i.e. the frequency of occupied grid cells in Germany) and (ii) the degree of naturalisation in Germany (naturalised in semi-natural vegetation or naturalised in anthropogenic vegetation). Using over 80 different traits, we used several different methods to identify relevant traits for invasion success – including corrections for phylogeny. The analyses yielded that most of the available traits were not significantly related with invasion success. Of these, morphological traits are less important for the success of plant invaders while ecological traits such as niche breadth, habitat, and range are more important. Thus there is a manageable number of easy characteristics that could be incorporated into a risk assessment.

keywords: plant traits, Germany, successful invaders, risk analysis