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ABSTRACTS



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New invader on Hungarian sandy grasslands: functional effects of *Sporobolus cryptandrus* on plant communities

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Invasive species cause severe ecological damages and their impact costs national economies billions of dollars every year. Instead of the expensive eradication and subsequent habitat restoration, prevention may be a more cost-effective solution, however, a crucial step before preventive measures is to assess the threat a newly colonizing non-native species may pose. In this study we evaluated native and non-native stands of a potentially invasive grass, *Sporobolus cryptandrus*.

Our aim was to reveal how its increasing cover affects the functional diversity and ecosystem service provisioning capacities of plant communities. We surveyed grassland patches in the Kiskunság, Hungary and in Montana, USA simultaneously, recording all vascular plant species and their relative abundances in 50 randomly placed quadrats in each 9 locations. In order to compare the plant communities of the two continents, we used a trait-based approach.

Increasing *Sporobolus* cover resulted in lower functional diversity, and reduced average specific leaf area and flowering period in Hungary but did not have these effects in the native stands. *Sporobolus* also negatively affected the cover of native perennials in Hungary, creating more space for annuals.

We conclude that the spread of *Sporobolus*, away from its native range, leads to the impoverishment of host communities and compromises the biomass and pollen provisioning capacity of the vegetation to higher trophic levels. Tackling the spread of this new invader should therefore be a priority task.