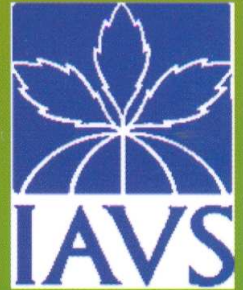


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## ABSTRACTS

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# Unravelling the sand trapping plants (nebkhas) as a potential tool against desertification and biodiversity loss in degraded arid environments

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Wind erosion is the principal mechanism of desertification in many arid and semi-arid regions of the world. In these regions, several native plant species naturally fix windblown materials in small, stable, phytogenic mounds or 'nebkhas', but none of them are currently used to combat desertification. In the coastal and inland arid dunes of Sinai and Saudi Arabia, we screen a variety of such species, not only for sand stabilisation, but also to promote biodiversity by creating habitats for other species, since nebkhas locally improve soil fertility and water status. We explore the potential of a new, natural rehabilitation technique to control the leakage of scarce resources from degraded arid landscapes. We also present evidence that, depending on human impact and landscape, nebkhas can trigger long-term changes in these ecosystems.