

Nationwide assessment of genetic variation of grassland plants as basis for the development of generalized seed transfer zones

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Species diversity and intraspecific genetic diversity play a critical role in conservation and restoration of grassland ecosystems. To maintain regional adaptations of native wild plants, seeds for restoration projects are produced regionally. The delineation of regions is organised by seed transfer zones (STZs). Ideally, generalised STZs should be based on comprehensive data of intraspecific genetic and phenotypic diversity for a larger number of species. However, such underlying data is missing.

The project RegioDiv fills this gap and generates empirical data on genetic variation of multiple grassland plant species across Germany. A total of 33 grassland species were collected across the 22 existing STZs, and a total of 11,976 samples were genotyped with SNP markers. Exemplary species level results of the genetic structure are presented and synthesized across species allowing the assessment of the current German STZ system and guide potential improvements.

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Online [https://tum-conf-zoom-x.de/j/69079483987?pwd=eIJ6bStBbXo0RHQ4aUJjVG1qRVpLdz09](https://tum-conf.zoom-x.de/j/69079483987?pwd=eIJ6bStBbXo0RHQ4aUJjVG1qRVpLdz09)

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