

## **Publication**

An Arabidopsis introgression zone studied at high spatio-temporal resolution: interglacial and multiple genetic contact exemplified using whole nuclear and plastid genomes

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Gene flow between species, across ploidal levels, and even between evolutionary lineages is a common phenomenon in the genus Arabidopsis. However, apart from two genetically fully stabilized allotetraploid species that have been investigated in detail, the extent and temporal dynamics of hybridization are not well understood. An introgression zone, with tetraploid A. arenosa introgressing into A. lyrata subsp. petraea in the Eastern Austrian Forealps and subsequent expansion towards pannonical lowlands, was described previously based on morphological observations as well as molecular data using microsatellite and plastid DNA markers. Here we investigate the spatio-temporal context of this suture zone, making use of the potential of next-generation sequencing and whole-genome data. By utilizing a combination of nuclear and plastid genomic data, the extent, direction and temporal dynamics of gene flow are elucidated in detail and Late Pleistocene evolutionary processes are resolved.

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