

# Wenjie Mu

He got his Master's degree in Ecology from Lanzhou University in 2022. He has devoted himself to unravelling the scenario of plant speciation and adaptive evolution using comparative genomics and bioinformatics methods. Recently, he has studied the evolutionary trajectories of two related species of the genus *Brachypodium*. He is interested in the co-evolution of endophytes with their host plants. He has joined BIFI to work in his project and with experts.



## Researcher profile

He studies the lateral gene transfer (LGT), the transfer of genetic material between organisms by means other than the traditional 'vertical' transfer of DNA (from parent to offspring), which is an important process in the evolution of many species. However, the potential impact of plant-to-plant LGT on the genomic composition. The overall goal is to increase the knowledge of LGT in opioids, studying its impact on a macroevolutionary scale, using high-quality genomic resources and genomic methods and to discover how this mechanism has contributed to the generation of evolutionary novelty.

## Importance of his research

This investigation is important because there are many food crops in the temperate pools, for which there is more information, indicating an improvement of these crops. However, these progress are limited because of the traditional methods. LGT has occurred occasionally, but it can be considered a solution and it can generate new adaptive traits. This research will provide insights of LGT at the microevolutionary scale, the acquisition of novel functional genes, and its potential role in adaptive speciation. These findings could contribute to the advancement of crop breeding and improvement.

