

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1  
Description: TrnL p6loop plant sequences

File Name: Supplementary Data 2  
Description: Pollen vs DNA

File Name: Supplementary Data 3  
Description: Occurrences and taxonomic assignments of the 16S sequences

File Name: Supplementary Data 4  
Description: PhyloAlps database fasta

File Name: Supplementary Data 5  
Description: Age and depth of the sedaDNA samples

File Name: Supplementary Data 6  
Description: Age and depth of the pollen samples

File Name: Supplementary Data 7  
Description: Primer tag to PCR replicate lookup

File Name: Supplementary Data 8  
Description: Proportions of weighted PCR replicates of the taxa found in the controls of the plant sedaDNA analyses

File Name: Supplementary Data 9  
Description: Proportion of weighted PCR replicates of the sedaDNA mammal taxa found in the controls

File Name: Supplementary Data 10  
Description: Statistical results of the RDA analyses

File Name: Supplementary Data 11  
Description: Chironomid assemblages from the unteres Sulssweewli record as shown in Supplementary information.

File Name: Supplementary Data 12  
Description: Chironomid-inferred mean July air temperatures (°C) for the unteres Sulsseewli record.