

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Sampling and sequencing details.

File name: Supplementary Data 2

Description: The source data behind the petal color analysis of the Supplementary Figure 10-12

File name: Supplementary Data 3

Description: The results of QuIBL analysis.

File name: Supplementary Data 4

Description: The results of D statistic.

File name: Supplementary Data 5

Description: List homologous genes associated with fixed divergent SNPs in *A. kansuensis* and *A. rockii*

File name: Supplementary Data 6

Description: Information on putative lineage specific outliers for each lineage

File name: Supplementary Data 7

Description: Bioclimatic variables and monthly solar radiation data for 23 populations.

File name: Supplementary Data 8

Description: Lineage settings for calculating PBS and ΔF_{ST} .