

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: The source data of fig. 1d that GC content vs. chromosome number of Fabaceae and non-Fabaceae species.

File name: Supplementary Data 2

Description: The source data of fig. 2c that LTR insertion time and density in six Fabales plants.

File name: Supplementary Data 3

Description: The source data of fig. 3a that Distribution of synonymous substitution rates (K_s) of homologous gene pairs between *O. viciifolia* and other species.

File name: Supplementary Data 4

Description: The source data of fig. 3b that Syntenic depths between *O. viciifolia* and *C. arietinum*.