

Description of Supplementary Data

File Name: Supplementary Data 1

Description: The RNA-seq data of *S. pennellii*. There are two sheets in this file:

Sheet 1 (Table S1-1): The highly expressed genes in glandular trichomes than stem epidermis removal of trichomes of *S. pennellii*.

Sheet 2 (Table S1-2): The highly expressed transcription factors in glandular trichomes of *S. pennellii*, LA4024 and LA1777.

File Name: Supplementary Data 2

Description: The RNA-seq data of *cr-gcr1/2* and *pMTR1:GCR1*. There are three sheets in this file:

Sheet 1 (Table S1-1): The up-regulated genes in trichomes of *cr-gcr1/2*.

Sheet 2 (Table S1-2): The down-regulated genes in trichomes of *pMTR1:GCR1*.

Sheet 3 (Table S1-3): The transcriptional factors of up-regulated in *cr-gcr1/2* and down-regulated in *pMTR1:GCR1*.