

Figure S1. Difference in bacterial wilt resistance between C244, C010, K326, and C035. (a) Breeding progress of the CSSLs. (b) Disease symptoms of C244, C010, K326, and C035 inoculated with Y45 by root irrigation at 25 and 35 dpi. (c) The disease index of C244, C010, K326, and C035 inoculated with Y45 by root irrigation. Bars represent the mean \pm standard deviation. Different lowercase letters represent statistically significant difference ($p < 0.05$, a two-tailed t -test).

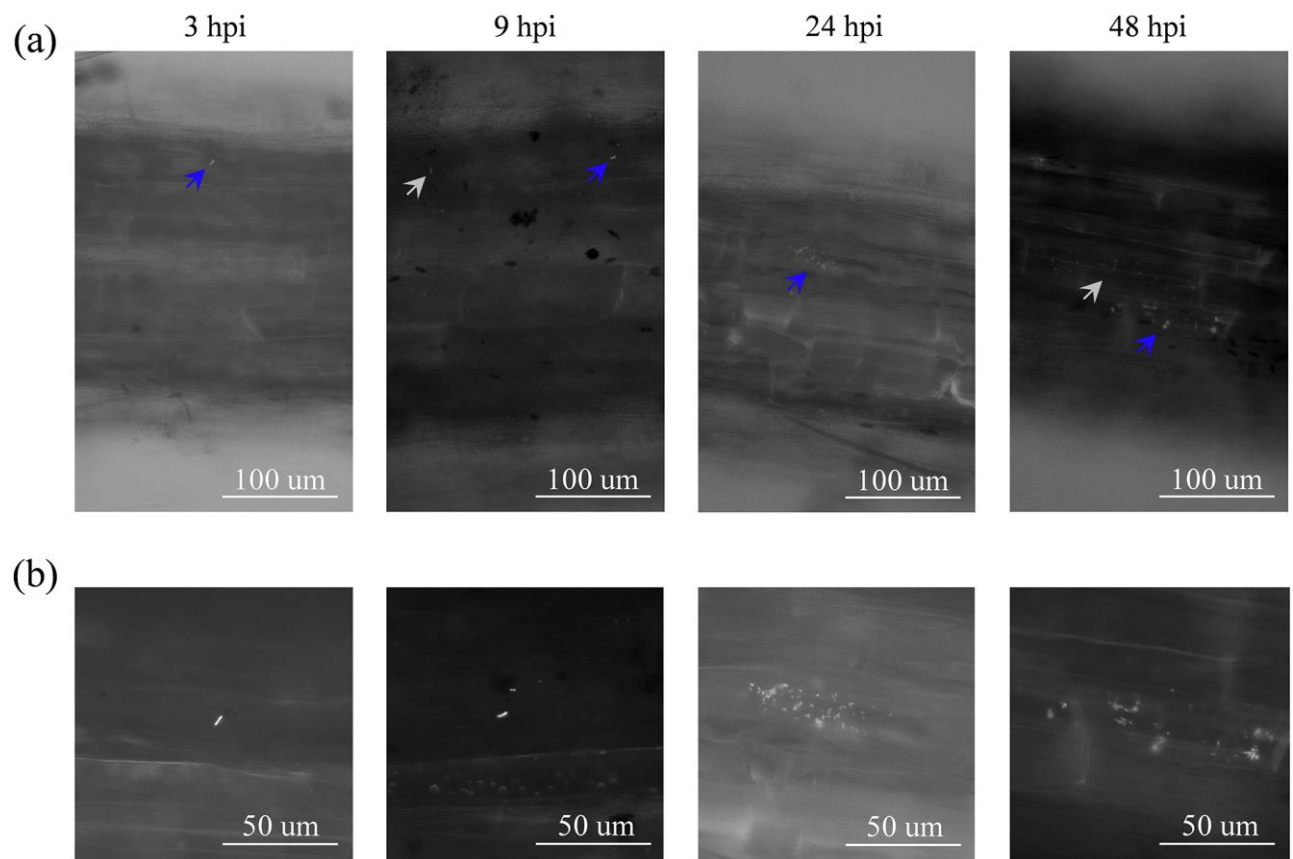


Figure S2. Fluorescence microscopy of the tobacco roots inoculated with GFP-tagged *Ralstonia solanacearum*. (a) The roots of five-leaf-old K326 seedlings were inoculated with a modified Y45 strain carrying a GFP-expressing plasmid and then observed using a fluorescence microscope, ECHO Revolve (San Diego, CA, USA). Considering autofluorescence from the tobacco roots, the green fluorescence was artificially removed to highlight the fluorescence signal of GFP-tagged *R. solanacearum*. (b) Enlarged drawing of the areas indicated by blue arrows.

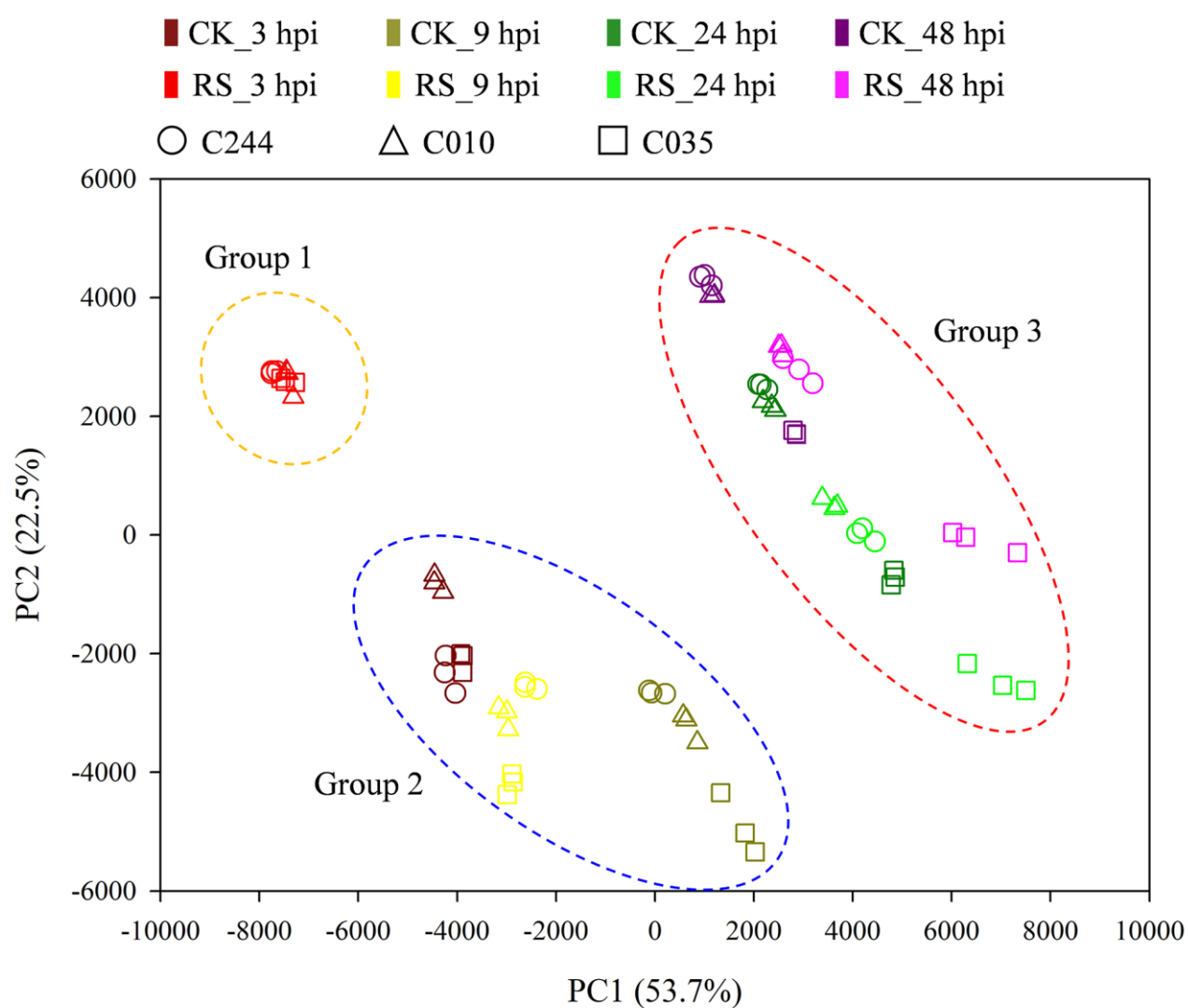


Figure S3. Principal component analysis of the sequencing samples based on gene expression. CK and RS indicate samples inoculated with water and *R. solanacearum*, respectively.

Replicate 1



Replicate 2



Replicate 3



TRV2:GFP

TRV2:Nitab4.5_0007488g0040

Figure S4. Disease symptoms of *TRV2:GFP* and *TRV2:Nitab4.5_0007488g0040* plants inoculated with Y45 by root irrigation at 21 dpi. VIGS was independently repeated three times, with each group containing a minimum of 15 plants.