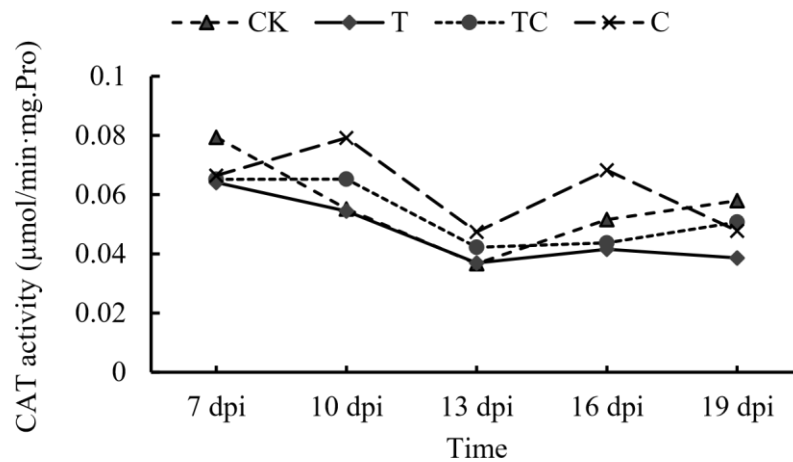
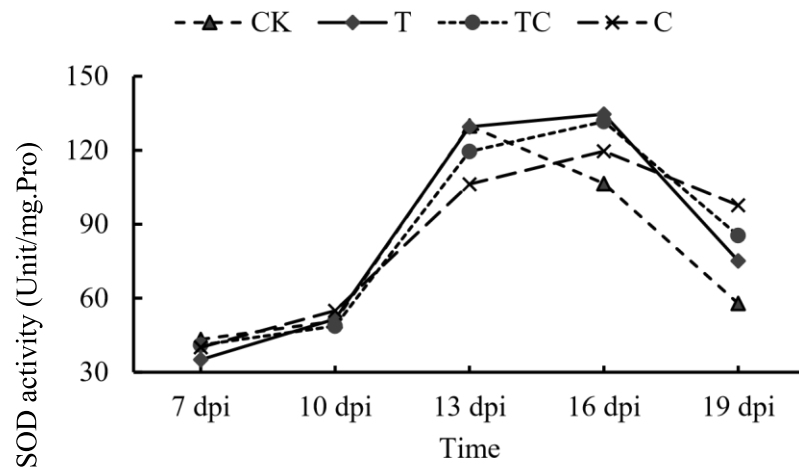
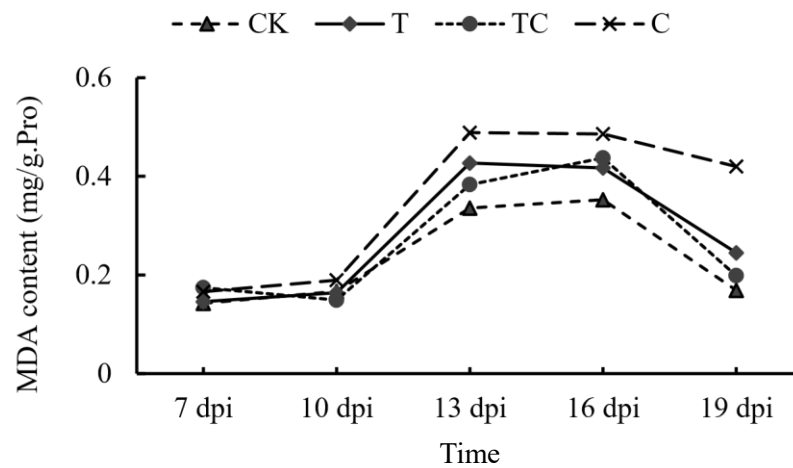
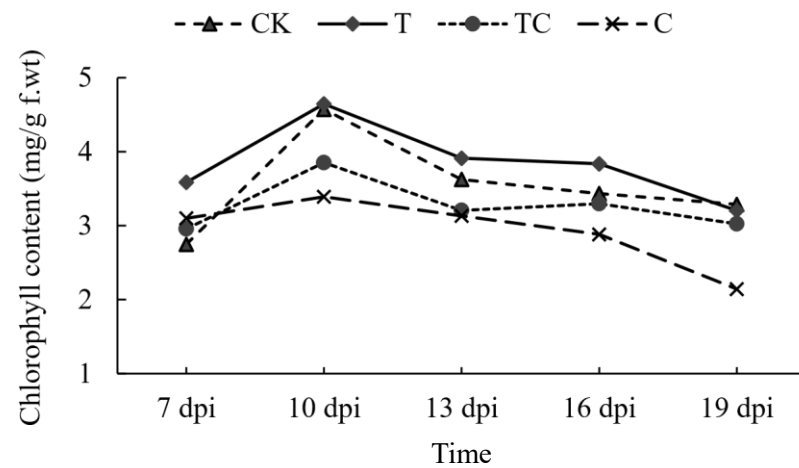


# Supplementary Materials



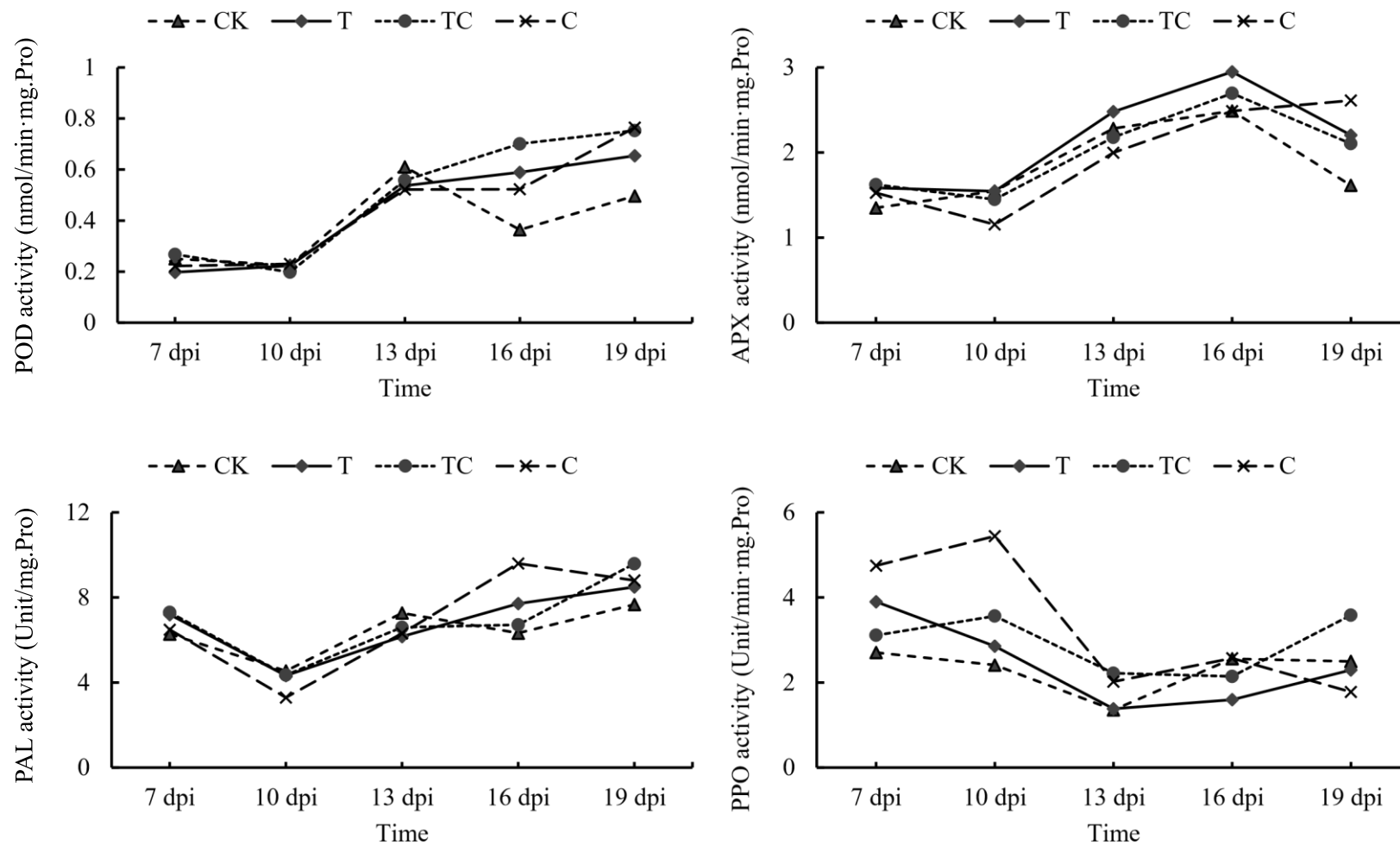


**Figure S1 Physiological performance of creeping bentgrass after *T. virens* treatment and/or inoculation of *C. homoeocarpa* at 7, 10, 13, 16, and 19 dpi.**

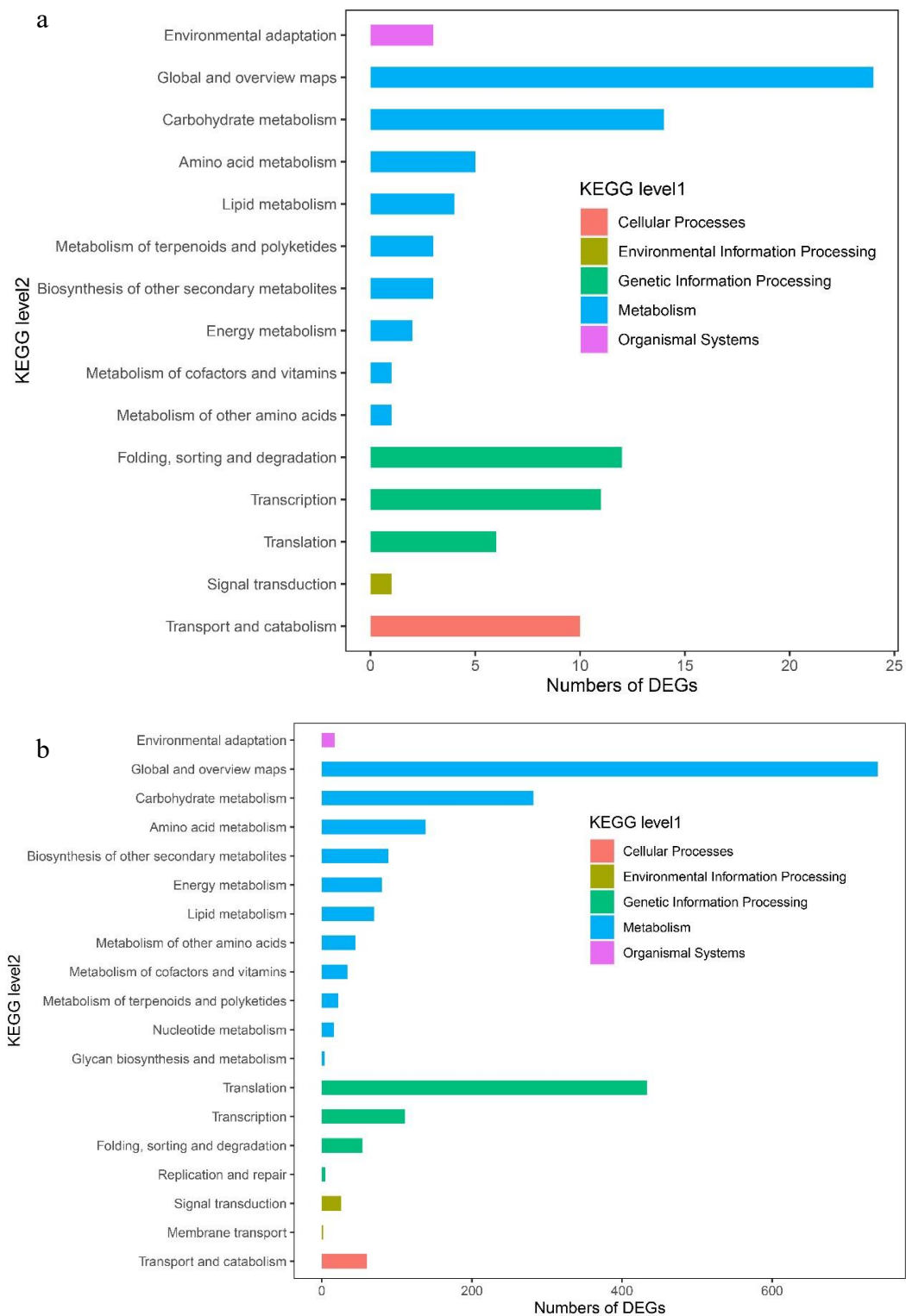


**Figure S2. The barchart of DEGs kegg class.** (a) The classification of 36 DEGs (filtered with  $|\log_2FC| \geq 2$  &  $P_{adj} < 0.01$ ) with kegg class between *T. virens* colonization (Tv) and control (CK). (b) The classification of 863 DEGs (filtered with  $|\log_2FC| \geq 2$  &  $P_{adj} < 0.01$ ) with kegg class between inoculation with *T. virens* and *C. homoeocarpa* (Tv+Ch) and *C. homoeocarpa*-only inoculation (Ch).

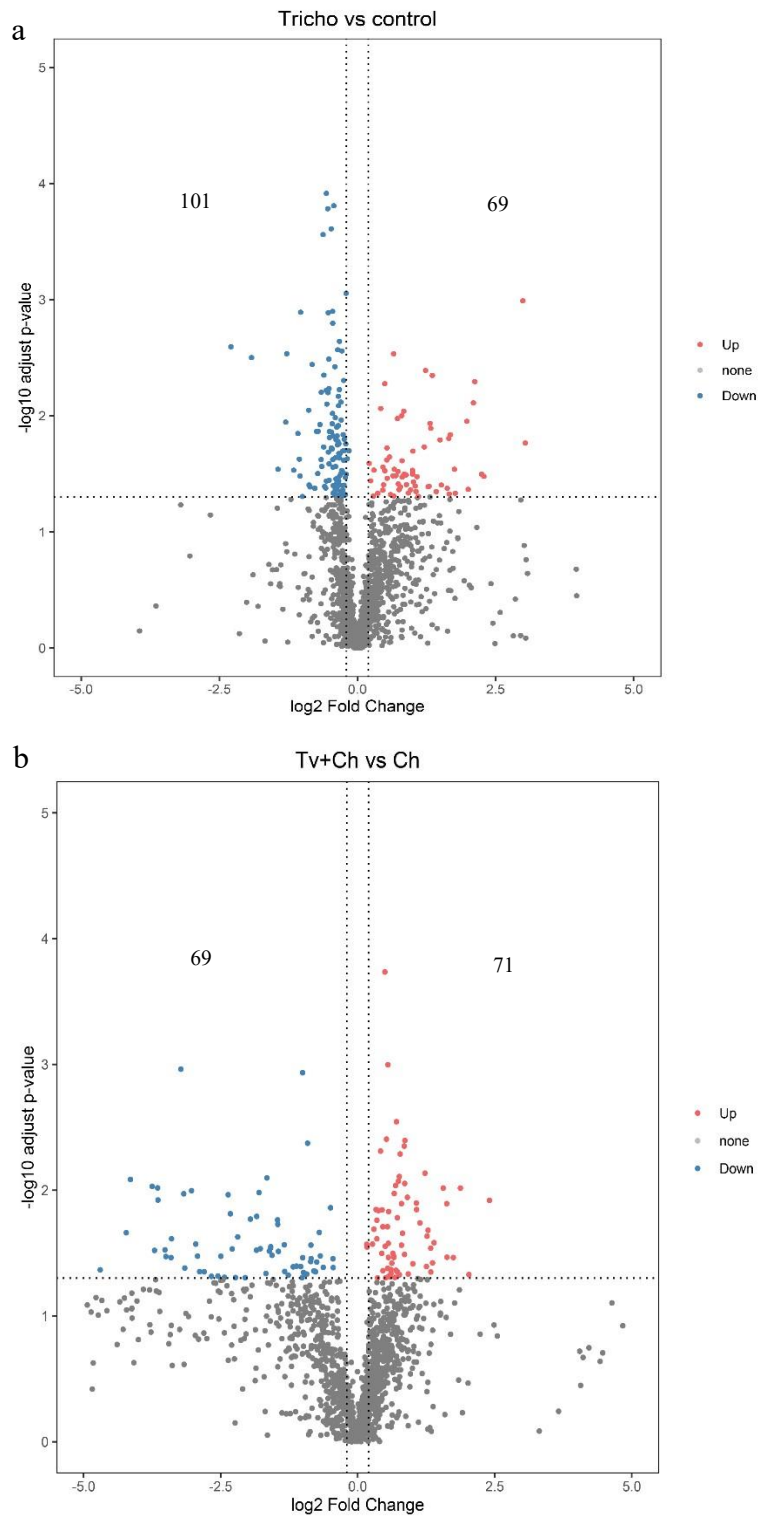


**Figure S3. The analysis of metabolites with different level.** (a) Volcano plot of the comparison across pre-contact with *T. virens* (Tv) and control plants (CK); (b) Volcano plot of the comparisons across inoculation with *T. virens* and *C.homoecarpa* (Tv+Ch) and *C. homoeocarpa*-only inoculation (Ch).

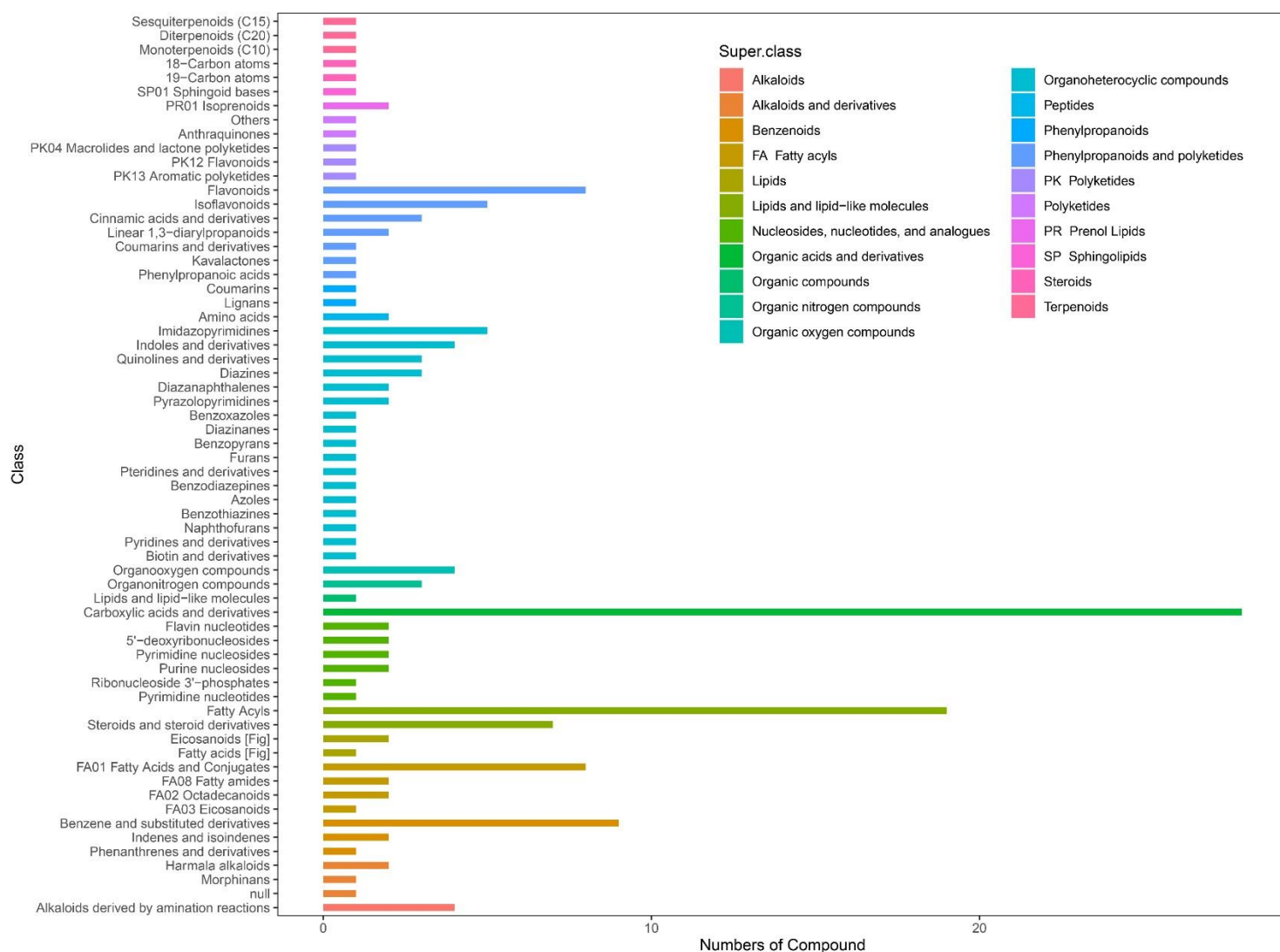


**Figure S4. Barchart of class and superclass of total 177 metabolites obtained from *T. virens* 192-45.**

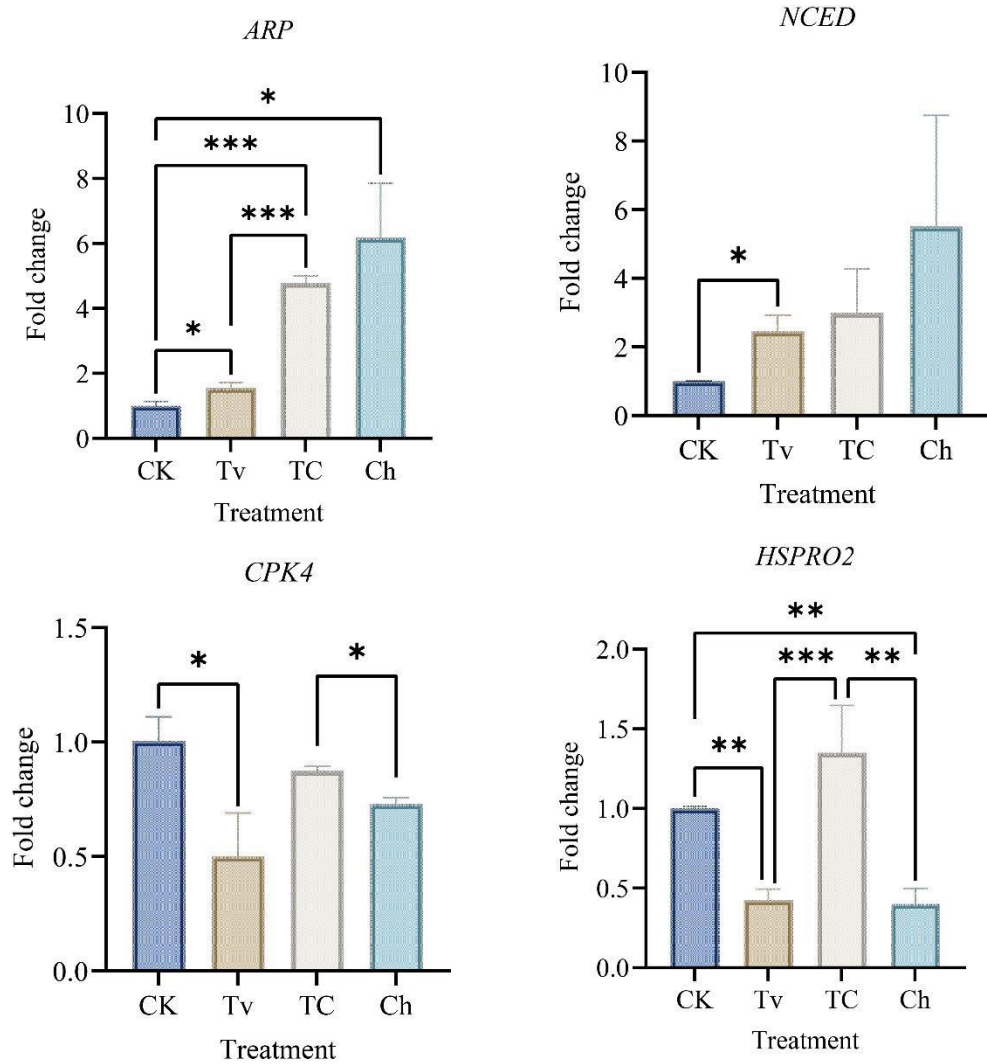


**Figure S5.** The expression of four candidate genes (ARP, NCED, CPK4, HSPRO2) performed by qRT-PCR.

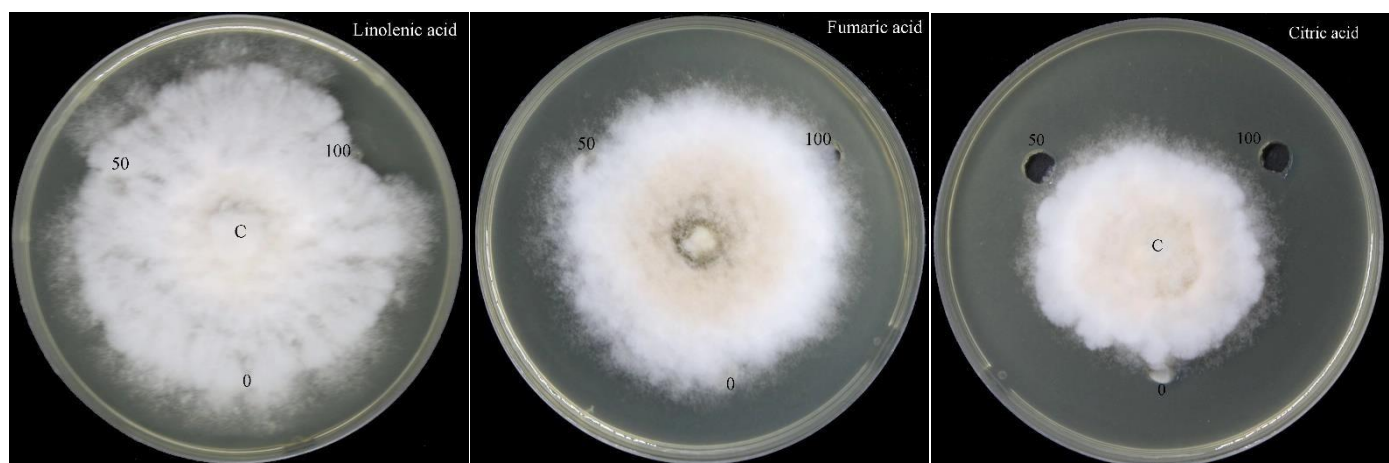


**Figure S6.** The disease control efficacy of linolenic, fumaric, and citric acid of 0, 50, 100 mg/mL on the growth of *C. homoeocarpa*