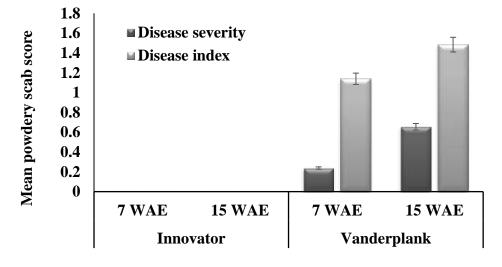


**Supplementary Figure 1.** Relative expression levels of selected potato defense genes in tolerant and susceptible potato cultivars determined by RNA-sequencing. Expression levels of *StTOSB*, *StSN2*, *StUDP*, *StSN1*, *StPRF*, *StLOX*, *StWRKY6*, *StMRNA*, *StDEF* and *StNBS* were measured in Innovator (INV) and Vanderplank (VDP) cultivars inoculated with *Spongospora subterranea* f. sp. *subterranea*.



**Supplementary Figure 2.** Mean powdery scab disease severity and disease index of two potato cultivars evaluated for *Spongospora subterranea* f. sp. *subterranea* tuber infection. Values are log 10 transformed means of the three biological replicates for each cultivar. Bars represent the standard error.