

## Supplemental Figure Legends

**Supplemental Fig. S1. Experimental workflow of proteomics and phosphoproteomics analysis during wheat-*Septoria tritici* interaction.** Wheat cvs. Stakado and Sevin were inoculated with *Septoria tritici* (*St*) or sprayed with water as control and harvested at 3, 7 and 11 days after inoculation. Three biological replications were prepared. Proteins were extracted, trypsin-digested and labeled with TMT six-plex with the ratio 1:1:1:1:1:1. Phosphopeptides were enriched by TiO<sub>2</sub> chromatography. Replication 1 of both phosphopeptides and total peptides were fractionated by HILIC prior to LC-MS/MS analysis, whereas the other two replicates were run twice in LC prior to MS/MS.

**Supplemental Fig. S2. Global expression patterns of quantified plant proteins (A) and phosphopeptides (B) in infected wheat cvs. Stakado and Sevin.** The proteome and phosphoproteome profiles are presented as a heatmap using average normalized ratio of infected sample/control at 3, 7 and 11 dai.

**Supplemental Fig. S3. Phosphorylation motifs of regulated phosphopeptides predicted by motif-x.**

**Supplemental Fig. S4. Fungal gene expression analysis in infected wheat cvs. Stakado and Sevin at 3, 7 and 11 dai.** Asterisks indicate significant differences ( $p < 0.05$ ) in relative gene expression after normalization between Stakado and Sevin at each time point. Full names of the genes are shown in Supplemental Table S1.

## Supplemental Tables

**Supplemental Table S1.** Primer sequences for qRT-PCR analysis of fungal genes.

**Supplemental Table S2.** Complete list of identified and quantified wheat proteins in wheat cvs. Sevin and Stakado infected by *Septoria tritici* at 3, 7 and 11 dai.

**Supplemental Table S3.** Complete list of identified and quantified wheat phosphopeptides in wheat cvs. Sevin and Stakado infected by *Septoria tritici* at 3, 7 and 11 dai.

**Supplemental Table S4.** Proteins differentially expressed in wheat in response to *Septoria tritici*.

**Supplemental Table S5.** Phosphopeptides showing significant changes in wheat after infection by *Septoria tritici*.

**Supplemental Table S6.** *Septoria tritici* proteins and phosphosites identified from infected wheat cvs. Stakado and Sevin.