**Supplemental Figures**

**Supplemental Fig. 1.** Root rot severity rating 21 days after planting for soybean seedlings planted at 18ºC and subjected to three periods of cold stress 48 hours after planting (48 hap) or 96 hours after planting (96 hap). A, 4ºC *Pythium sylvaticum*-inoculated cups; B, 4ºC non-inoculated cups; C, 10ºC *P. sylvaticum*-inoculated cups; D, 10ºC non-inoculated cups. A score of 0 to 3 was used to assess root rot severity where 0= all roots healthy; 1= 1 to 20% root system has visible lesions on lateral roots; 2= 21 to 75% of roots show visible symptoms, with symptoms beginning to show on tap root; 3= 76 to 100% of roots infected with symptoms on lateral roots and tap roots, short or very few lateral roots are observed. Arithmetic means per treatment are displayed here as a reference since least square means cannot be calculated in SAS using PROC GLIMMIX with a multinomial distribution.

**Supplemental Fig. 2.** Results for Run 1 of fresh root weight per plant (mg) measured 21 days after planting for soybean seedlings planted at 18ºC and subjected to periods of cold stress 48 hours after planting (48 hap) or 96 hours after planting (96 hap). A, 4ºC *Pythium sylvaticum*-inoculated cups; B, 4ºC non-inoculated cups; C, 10ºC *P. sylvaticum* inoculated cups; D, 10ºC non-inoculated cups. Error bars indicate confidence interval 95%. Different letters within the same panel indicate significant differences according to Tukey’s test, alpha = 0.05.

**Supplemental Fig. 3.** Results for Run 2 of fresh root weight per plant (mg) measured 21 days after planting for soybean seedlings planted at 18ºC and subjected to periods of cold stress 48 hours after planting (48 hap) or 96 hours after planting (96 hap). A, 4ºC *Pythium sylvaticum*-inoculated cups; B, 4ºC non-inoculated cups; C, 10ºC *P. sylvaticum* inoculated cups; D, 10ºC non-inoculated cups. Error bars indicate confidence interval 95%. Different letters within the same panel indicate significant differences according to Tukey’s test, alpha = 0.05.

**Supplemental Fig. 4.** Results of Run 1 of fresh shoot weight per plant (mg) 21 days after planting for soybean seedlings planted at 18ºC and subjected to periods of cold stress 48 hours after planting (48 hap) or 96 hours after planting (96 hap). A, 4ºC *Pythium sylvaticum*-inoculated cups; B, 4ºC non-inoculated cups; C, 10ºC *P. sylvaticum*-inoculated cups; D, 10ºC non-inoculated cups. Error bars indicate confidence interval 95%. Different letters within the same panel indicates significant differences according to Tukey’s test, alpha = 0.05.

**Supplemental Fig. 5.** Results of Run 2 of fresh shoot weight per plant (mg) 21 days after planting for soybean seedlings planted at 18ºC and subjected to periods of cold stress 48 hours after planting (48 hap) or 96 hours after planting (96 hap). A, 4ºC *Pythium sylvaticum*-inoculated cups; B, 4ºC non-inoculated cups; C, 10ºC *P. sylvaticum*-inoculated cups; D, 10ºC non-inoculated cups. Error bars indicate confidence interval 95%. Different letters within the same panel indicate significant differences according to Tukey’s test, alpha = 0.05.