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RNA-seq analysis of the role of silicon in the interaction soybean-*Phytophthora sojae* reveals interference with effector/receptor recognition

*Aliyeh Rasoolizadeh**, Department of Phytology, Laval University, Quebec, Canada

Caroline Labbe, Center of Horticulture Research, Laval University, Quebec, Canada

Humira Sonah, Department of Plant Science, Laval University, Quebec, Canada

Joan Laur, Department of Phytology, Laval University, Quebec, Canada

Silicon (Si) is reputed to offer protection to plants against biotrophic and hemibiotrophic pathogens. Considering that *Phytophthora sojae* is a hemibiotroph that relies heavily on effectors for its virulence against soybean, the pathosystem *P. sojae*-soybean is perfectly suited to both validate the prophylactic role of Si and offer insights into the elusive role of Si. In this context, the present study had two main objectives: 1) to assess the prophylactic role of Si against *P. sojae* in soybean, and; 2) to investigate how Si fertilization affects both soybean and *P. sojae* through dual RNA-seq analysis of the interaction. Based on the phenotypic response, Si fertilization prevented disease development and mortality in soybean plants inoculated with *P. sojae*. Surprisingly, comparative transcriptomic analysis of the interaction with and without Si treatment revealed a much higher expression of *P. sojae* effectors and plant receptors (NB-LRR), together with plant reactions, under the control treatment. These data suggest that Si plays a role in preventing *P. sojae* effectors from reaching plant receptors, which result in a form of non-host recognition and concomitant lesser infection.