

### **Abstract**

Center rot of onion, caused by *Pantoea ananatis*, was first reported on onion in Georgia in 1997 and has continued to reduce yields and cause postharvest losses. In a previous study, we developed a nondestructive assay that demonstrated an association between *P. ananatis* and approximately 10% of the tobacco thrips, *Frankliniella fusca*, surveyed. In this study, we report that all strains of *P. ananatis*, isolated from surface-sterilized, crushed thrips, were pathogenic when inoculated onto greenhouse-grown onion plants. Furthermore, when 6 to 12 thrips harboring populations of *P. ananatis* of  $1 \times 10^3$  CFU ml<sup>-1</sup> or greater were placed on healthy onion seedlings to feed, disease transmission occurred in 52% of the plants challenged. Incubation periods ranged from 4 to 9 days. Bacteria isolated from symptoms typical of those associated with center rot were characterized and identified as *P. ananatis*. In contrast, an equal number of plants remained healthy for up to 28 days after being exposed to the same number of tobacco thrips that were identified as being free of *P. ananatis*.