

Review of: "Detecting Phytophthora cinnamomi associated with dieback disease on Carya cathayensis using loop-mediated isothermal amplification"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

Chinese hickory (*Carya cathayensis* Sarg.) is an economically and ecologically important nut plant in China. Dieback and basal stem necrosis have significantly affected plant growth and nut production. The author conducted a survey to evaluate the disease incidence at five sites in Linan County, China. The results showed that the highest incidence was recorded at the Tuankou site at up to 11.39% in 2019. The oomycete, *Phytophthora cinnamomi*, was isolated from symptomatic plant tissue and plantation soil using baiting and selective media-based detection methods and identified. Artificial infection with the representative *P. cinnamomi* ST402 isolate produced vertically elongated discolorations in the outer xylem and necrotic symptoms in *C. cathayensis* seedlings in a greenhouse trial. LAMP detection showed a high coherence level with the baiting assays for *P. cinnamomi* detection in the field. This study provides the evidence of existence of high-pathogenic *P. cinnamomi* in the *C. cathayensis* plantation soil in China and the insights into a convenient tool developed for conducting field monitoring of this aggressive pathogen. The research was innovative and original. I think this paper will make a nice contribution to the journal.

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