

Cite this as: Wang-bin Zhang, Hai-lin Yan, Zong-cai Zhu, Chao Zhang, Pei-xiu Du, Wen-jun Zhao, Wei-min Li, 2020. Genome-wide identification of the Sec-dependent secretory protease genes in *Erwinia amylovora* and analysis of their expression during infection of immature pear fruit. *Journal of Zhejiang University-Science B (Biomedicine & Biotechnology)*, **21**(9):716-726.
<http://doi.org/10.1631/jzus.B2000281>

Genome-wide identification of the Sec-dependent secretory protease genes in *Erwinia amylovora* and analysis of their expression during infection of immature pear fruit

Key words: *E. amylovora*, Sec secretory system, Protease, Gene expression, Plant infection

Research Summary

The study identified the Sec-dependent secretory protease genes in *E. amylovora* on a genome-wide scale, and further explored their expression profiles when the bacterium infected immature pears.

Innovation points

- ***E. amylovora*** harbors all of the essential components of the Sec-dependent secretory system.
- At least 15 putative Sec-dependent secretory proteases present in *E. amylovora*.
- Eleven of the Sec-dependent secretory proteases have potential roles in plant infection.