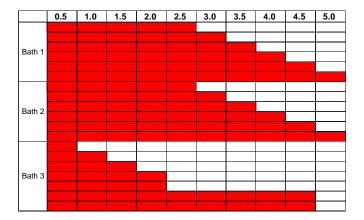


Appendix A Maturation success (mean \pm SE) of *Plutella xylostella* after 3rd-instar larval exposures at 40°C. Maturation success was measured as the proportion of emerged adults from larvae surviving after heat treatments. Different letters above each bar indicate significant differences between exposure times at 40°C (P < 0.05) based on post hoc tests. Adapted from Zhang *et al.*, 2015.



Appendix B Experimental details of heat treatment by water bath. Before treatment, every 24 tubes (together with tested individuals) from the same treatment were inserted into a 24-well plate. A water bath could maximally heat 6 plates meanwhile. Total number of 19 plates were heated by three water baths. Immerging a plate into the water bath for a certain duration was showed by the number of cells (each cell represent 0.5 h heat exposure) filled in red color.

References

1. Zhang, W., Chang, X.Q., Hoffmann, A.A., Zhang, S., Ma, C.S., 2015. Impact of hot events at

different developmental stages of a moth: the closer to adult stage, the less reproductive output. *Scientific Reports* **5**, 10436.