

for:

**Development of a Stage- and Species-Specific RNAi System for
Molecular Insights in *Trichogramma* Wasps**

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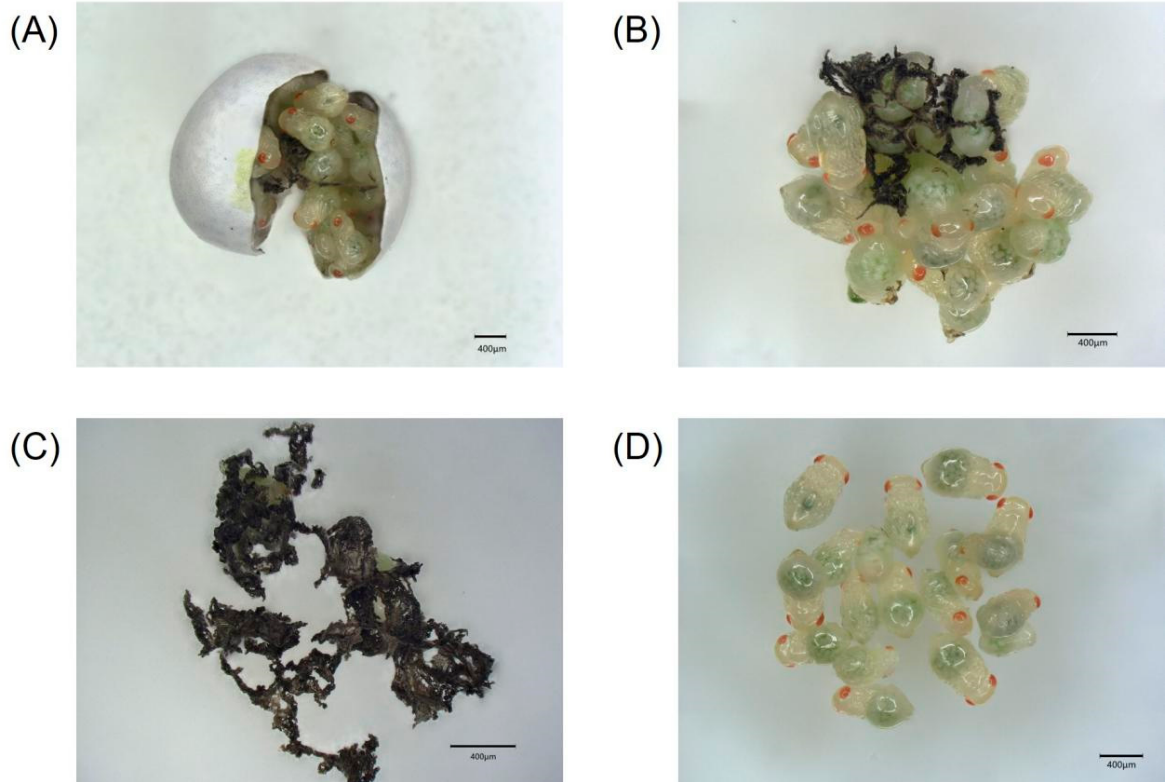
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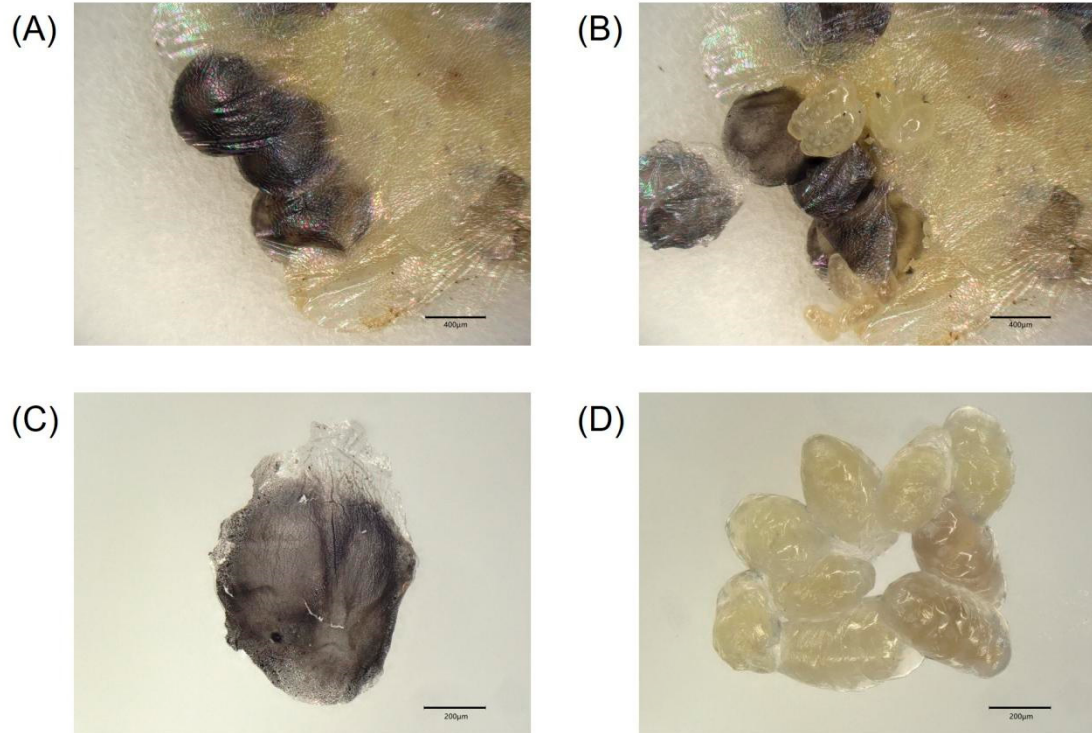
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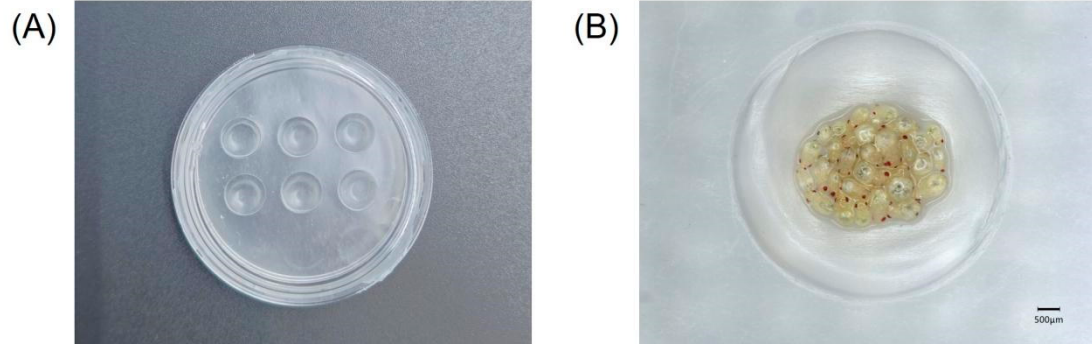
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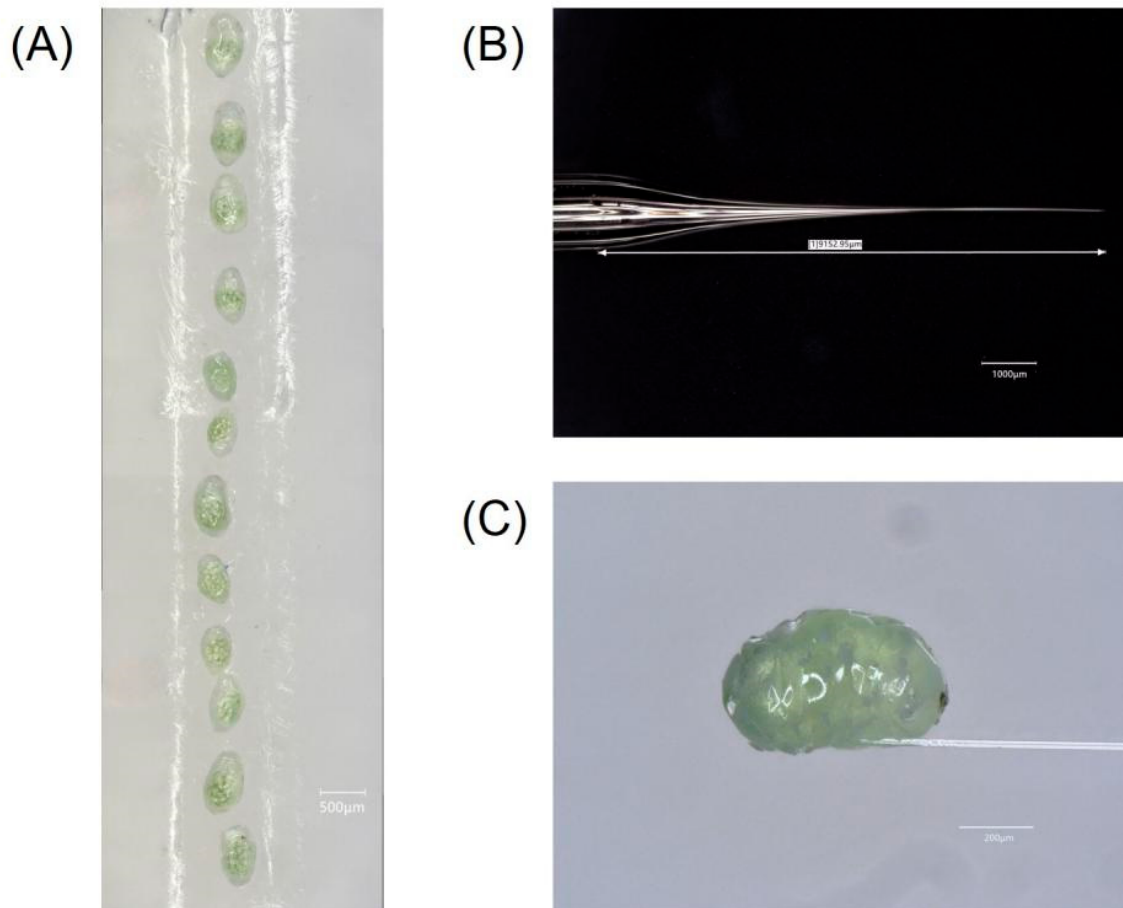
Supplementary Figure S3. Dissection-based isolation of *Trichogramma dendrolimi* Pupae from *Antheraea pernyi* Eggs. (A) Bisected *A. pernyi* egg halves revealing internal *T. dendrolimi* pupa; (B) Dissected *T. dendrolimi* pupa from an *A. pernyi* egg; (C) Removed hydrophobic black matrix encapsulating *T. dendrolimi* pupa in *A. pernyi* egg; (D) *T. dendrolimi* pupa devoid of hydrophobic black matrix post-removal; Scale bar = 400 μm .



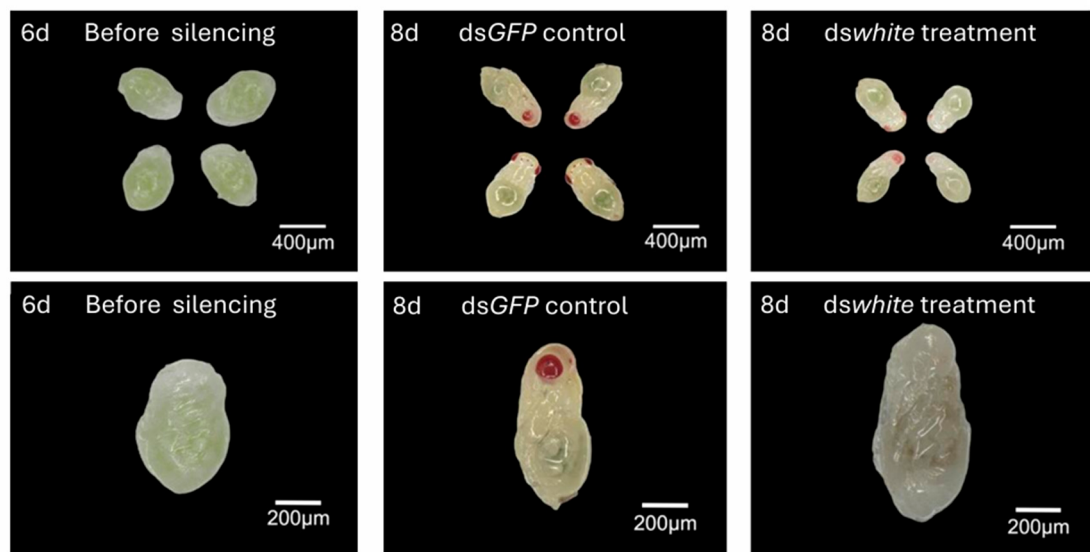
Supplementary Figure S4. Dissection-based isolation of *Trichogramma ostriniae* Pupae from *Ostrinia furnacalis* Eggs. (A) *O. furnacalis* egg parasitized by *T. ostriniae* (black coloration indicates parasitized eggs); Scale bar = 400 μm; (B) Dissection of *T. ostriniae* pupae from *O. furnacalis* eggs; Scale bar = 400 μm; (C) Chorionic remnants of *O. furnacalis* host egg after dissection; Scale bar = 200 μm; (D) Dissected *T. ostriniae* pupa isolated from *O. furnacalis* egg chorion; Scale bar = 200 μm.



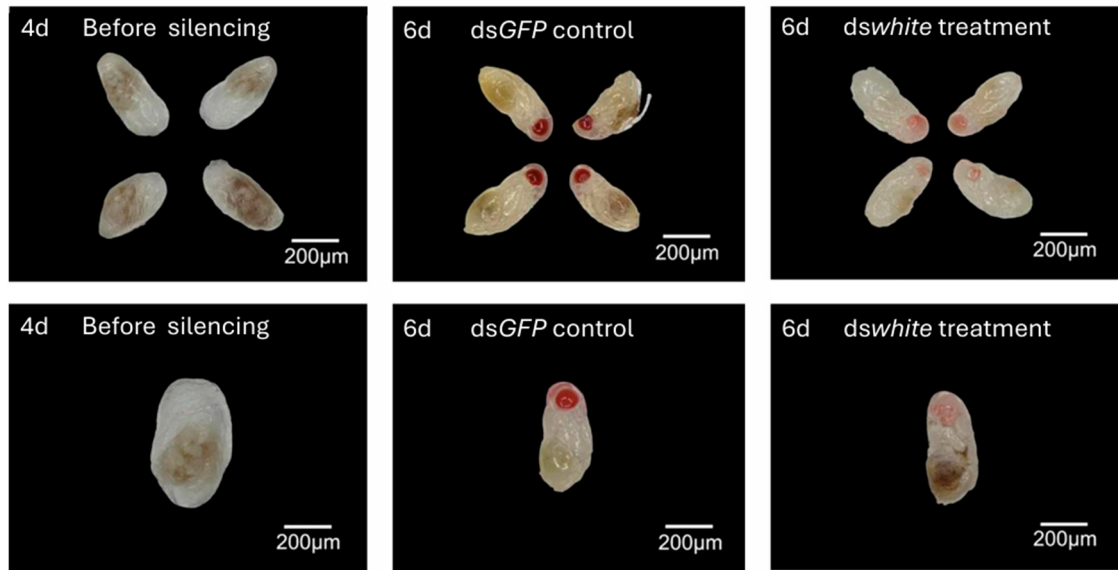
Supplementary Figure S5. Soaking-mediated RNAi in *Trichogramma* wasps. (A) Preparation of artificial host eggs; (B) *Trichogramma* pupae that soaked in dsRNA solutions within artificial host eggs.



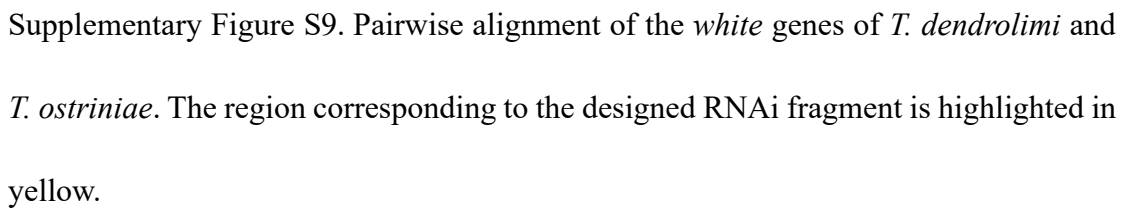
Supplementary Figure S6. Microinjection-mediated RNAi in *Trichogramma* wasps. (A) Mounting *Trichogramma* pupae on an agar substrate for microscopic manipulation; (B) Glass needle used for microinjection; (C) Microinjection into a *Trichogramma* pupa.



Supplementary Figure S7. Phenotypes of *T. dendrolimi* before and after *white* gene silencing. Left panel: The synchronized prepupa (6th day post-parasitism) before dsRNA treatment. Middle panel: After 48 hours dsRNA treatment, pupa (8th day post-parasitism) treated with *dsGFP*. Right panel: After 48 hours dsRNA treatment, pupa (8th day post-parasitism) treated with *dswhite*.



Supplementary Figure S8. Phenotypes of *T. ostrinia* before and after *white* gene silencing. Phenotypes of *T. ostrinia* before and after *white* gene silencing. Left panel: The synchronized prepupa (4th day post-parasitism) before dsRNA treatment. Middle panel: After 48 hours dsRNA treatment, pupa (6th day post-parasitism) treated with *dsGFP*. Right panel: After 48 hours dsRNA treatment, pupa (6th day post-parasitism) treated with *dswhite*.



Supplementary Figure S9. Pairwise alignment of the *white* genes of *T. dendrolimi* and *T. ostriniae*. The region corresponding to the designed RNAi fragment is highlighted in yellow.

