
Supplementary information

**Pollen-inspired enzymatic microparticles
to reduce organophosphate toxicity in
managed pollinators**

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Pollen-inspired enzymatic microparticles to reduce organophosphate toxicity in managed pollinators

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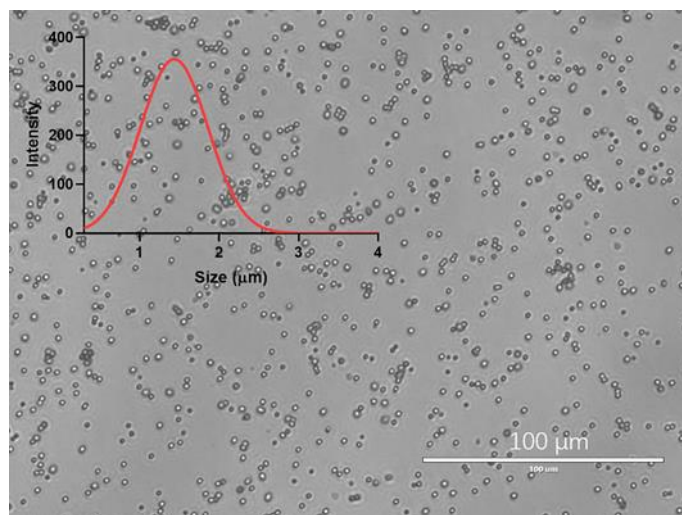
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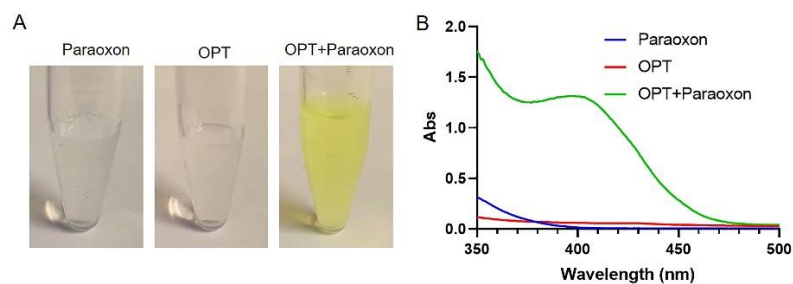
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Supplementary Figures



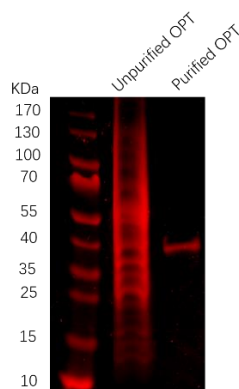
Supplementary Figure 1. Morphological and size distribution analysis of PIMs in pH 4.8 after 1.5h.



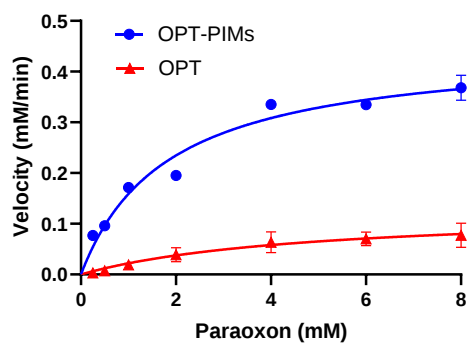
Supplementary Figure 2. A. Formation of nitrophenol from paraoxon. B. UV spectrum of paraoxon and paraoxon degraded by OPT.

Time (day)	0	2	4	7
Protein leaking percentage of OPT-PIMs (%)	0	0	0	0

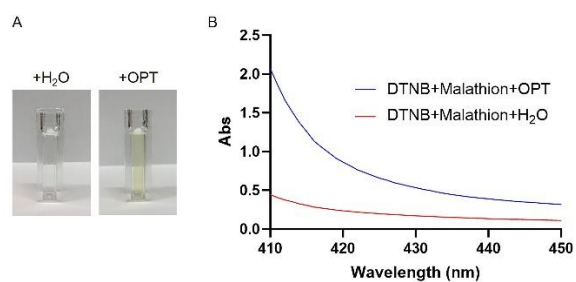
Supplementary Figure 3. Protein leaking test over one week.



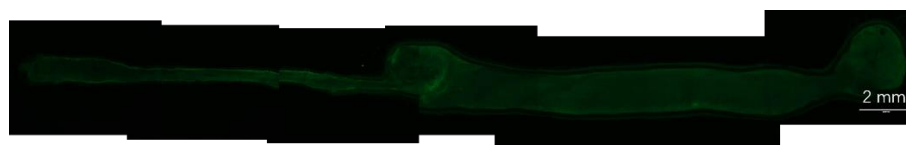
Supplementary Figure 4. SDS-PAGE of OPT (molecular weight 39 kDa)



Supplementary Figure 5. Kinetic profile of OPT and OPT-PIMs in 2 g/mL sucrose.



Supplementary Figure 6. A. Picture of malathion with and without OPT. B. UV spectrum of malathion and malathion degraded by OPT.



Supplementary Figure 7. Autofluorescence of bee gut without treatment.