



Article

Polymer chemical identity as a key factor in microplastic-insecticide antagonistic effects during embryogenesis of sea urchin *Arbacia lixula*

Petra Burić ¹, Ines Kovačić ², Lara Jurković ³, Serkan Tez ⁴, Rahime Oral ⁴, Nediljko Landeka ⁵ and Daniel M. Lyons ^{3,*}

¹ Faculty of Natural Sciences, Juraj Dobrila University of Pula, 52100 Pula, Croatia

² Faculty of Educational Sciences, Juraj Dobrila University of Pula, 52100 Pula, Croatia

³ Center for Marine Research, Ruđer Bošković Institute, 52210 Rovinj, Croatia

⁴ Faculty of Fisheries, Ege University, 35100 Bornova, Turkey

⁵ Teaching Institute of Public Health of the Istrian County, 52100 Pula, Croatia

* Correspondence: lyons@irb.hr

1. Supplementary Information

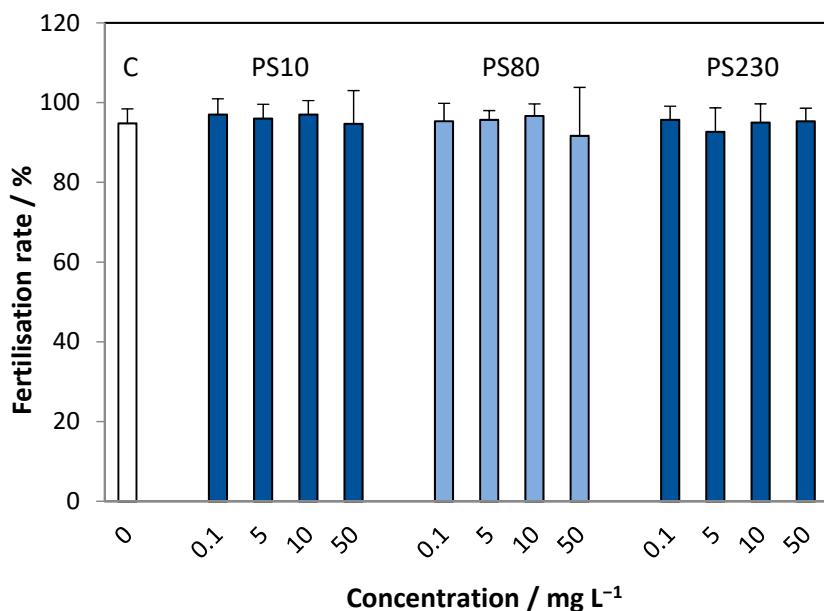


Figure S1. Fertilisation success of *A. lixula* sperm after exposure to 10, 80 and 230 µm PS microparticles of various concentrations (C – control).

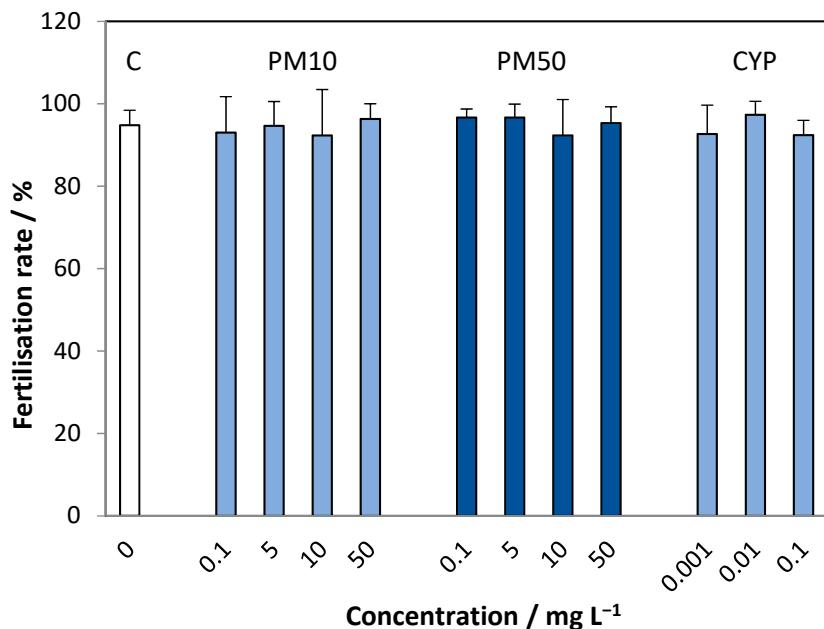


Figure S2. Fertilisation success of *A. lixula* sperm after exposure to 10 and 50 µm PMMA and cypermethrin over a range of concentrations (C – control).

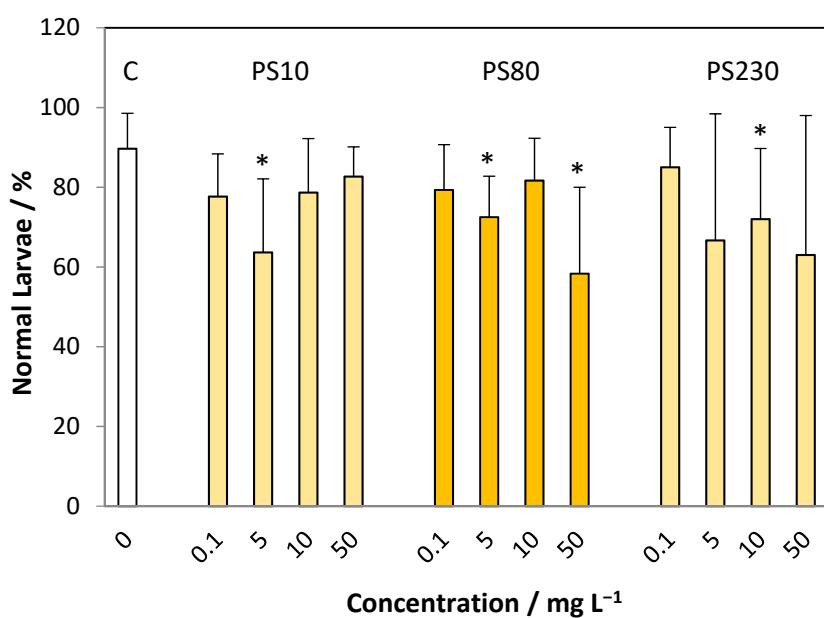


Figure S3. Normally developed offspring of sperm exposed to 10, 80 and 230 µm –diameter PS microparticles of various concentrations (C – control). Significance level, *p < 0.05.

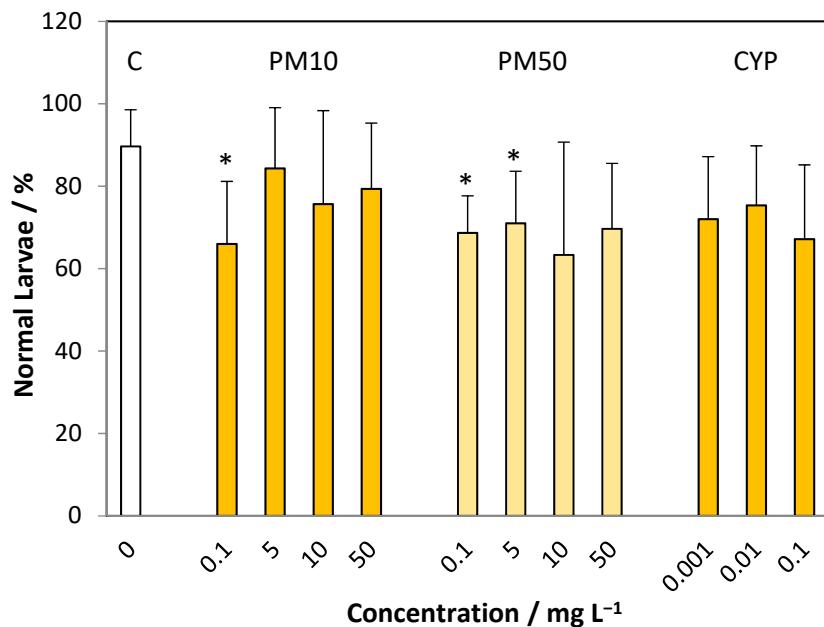


Figure S4. Normally developed offspring of sperm exposed to 10 and 50 μm -diameter PMMA and cypermethrin over a range of concentrations (C – control). Significance level, * $p < 0.05$.

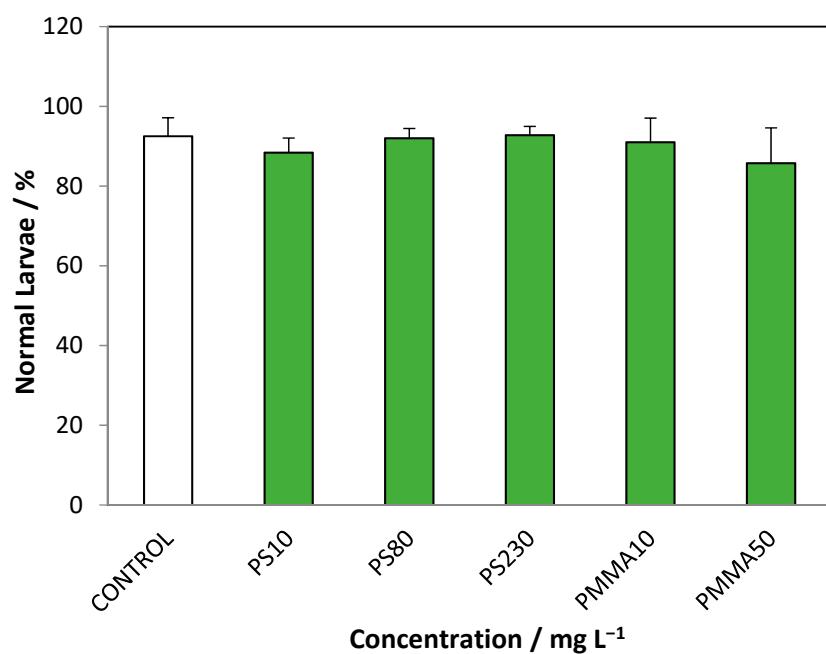


Figure S5. Normally developed offspring of sperm pre-treated with microplastic leachate (50 mg L⁻¹ microplastic in filtered seawater for 1 month).