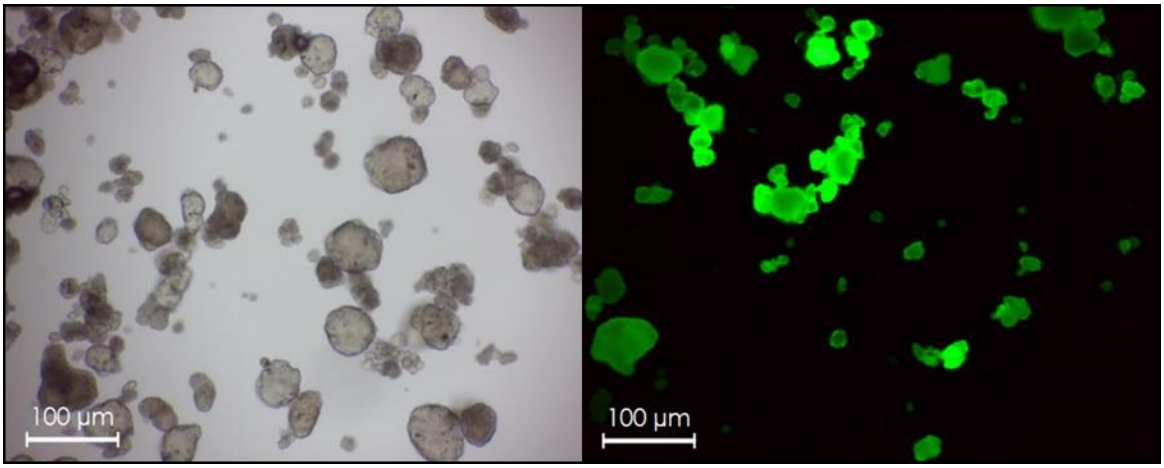

Figure S1. Microscope images of PE MPs, used to perform the exposures, observed in brightfield (left) and, stained with Nile red, in green fluorescence (ex. 450–490; em 515–565 nm) (right).

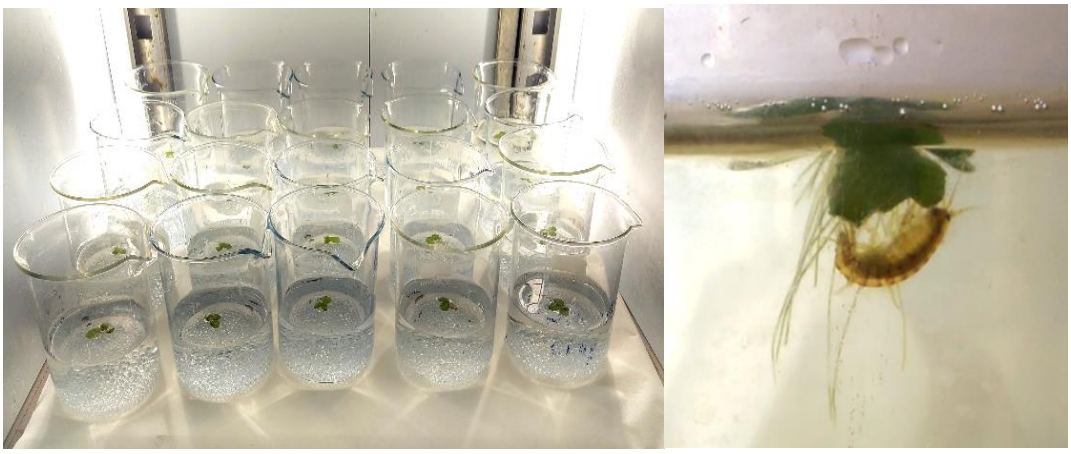

Figure S2. Specimens of *E. veneris* individually placed in 100 mL beakers filled with 100 mL tap water in presence of a single *S. polyrhiza* colony previously treated with PE MPs for 24h (left); Particular of *E. veneris* individual clung to plant roots during feeding (right).

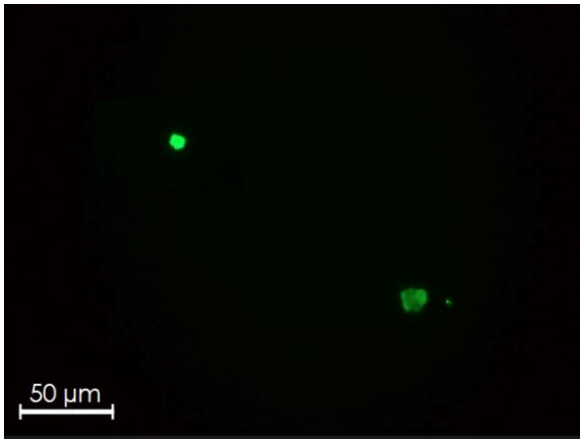

Figure S3. Microscope images of PE MPs, from digestive tracts of *E. veneris*, on a filter stained with Nile red, observed in green fluorescence.

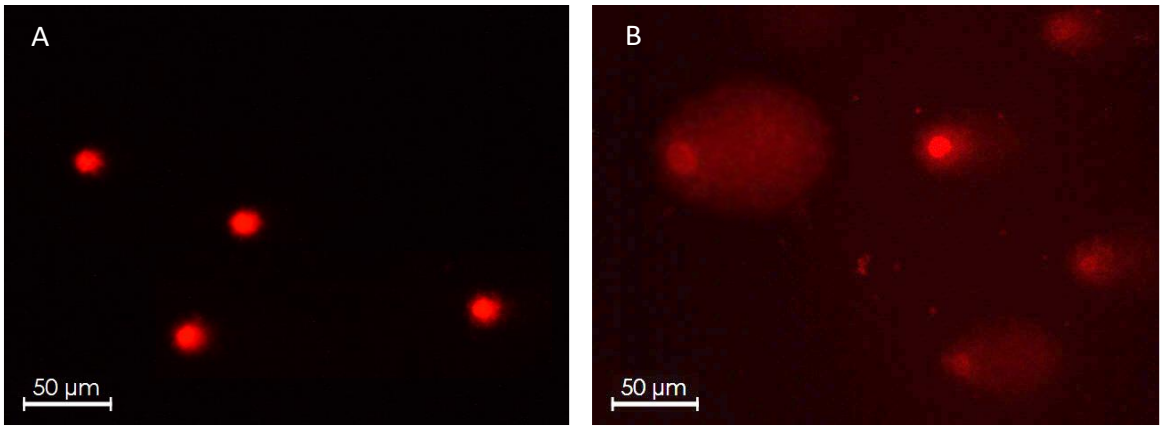

Figure S4. Representative images of nuclei from *Echinogammarus veneris* haemocytes, treated (B) or not (A) with 40 mg/L PE MPs in water for 24h, exhibiting different DNA damage level after Alkaline Comet assay procedure and EtBr staining.