

Electronic Supplementary Information

On the safety of nanoformulations to non-target soil invertebrates – atrazine case study

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Table S1 Hydrodynamic diameter (Z average), using dynamic light scattering (DLS) of the polymeric nanocapsules (NCs) and nanocapsules containing atrazine (nano_ATZ): mean diameter is the average of 3 measurements (\pm standard deviation); polydispersity index (PDI).

material	equivalent soil concentration (mg ATZ/kg soil)	Diameter (nm)	PDI
NCs	1	221 \pm 2	0.226
	5	219 \pm 3	0.134
	10	224 \pm 2	0.153
	50	219 \pm 4	0.120
	100	223 \pm 2	0.139
	200	219 \pm 3	0.132
nano_ATZ	1	238 \pm 3	0.237
	5	230 \pm 1	0.155
	10	240 \pm 1	0.162
	50	237 \pm 1	0.173
	100	236 \pm 1	0.171
	200	232 \pm 3	0.172

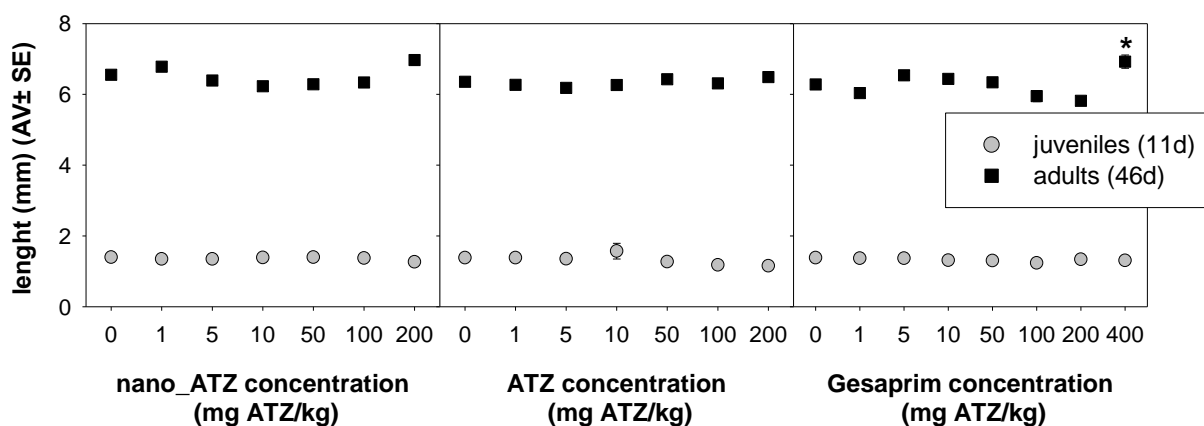


Fig. S1 Results of *Enchytraeus crypticus*' length after exposure to nanocapsules containing atrazine (nano_ATZ), pure atrazine (ATZ), and gesaprim, in LUFA 2.2 soil,

for 11 and 46 days. Results are presented as average \pm standard error.). * $p < 0.05$ (Dunn's method).

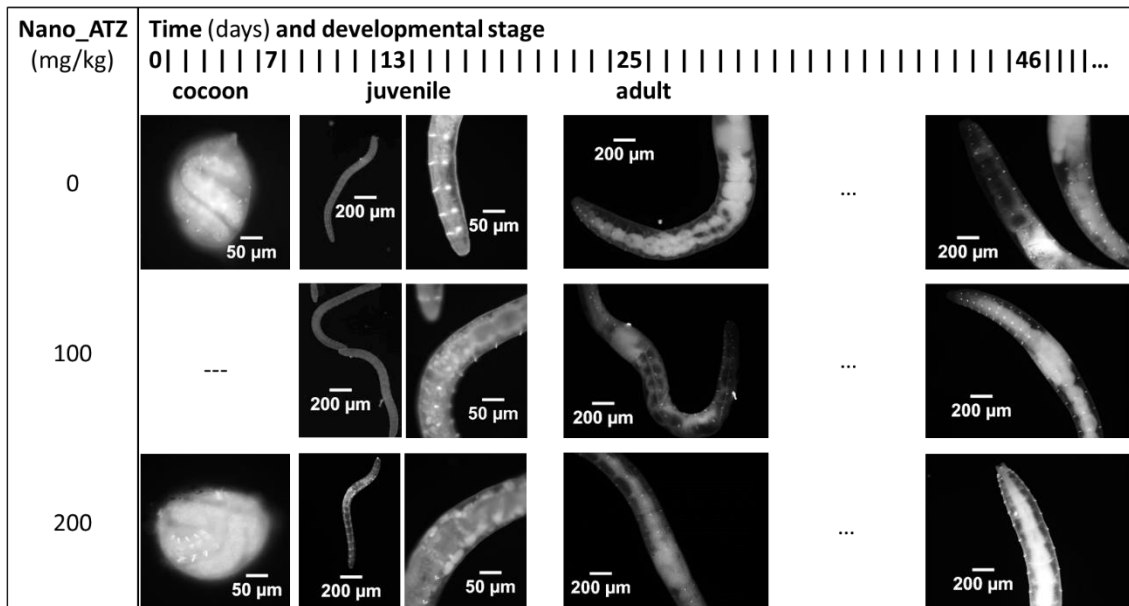


Fig. S2 Selected pictures from fluorescence microscope analysis of *Enchytraeus crypticus*, collected over time: cocoons (7 days), juveniles (13 days), and adults (25 and 46 days), when exposed to 0, 100 and 200 mg ATZ/kg of labelled nanocapsules containing atrazine (labelled_nano_ATZ) in LUFA 2.2 soil.