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Supplementary Materials

Hydra vulgaris assay as environmental assessment tool for ecotoxicology in freshwaters: a review

A. Cera[A,1], *G. Cesarini*[A,1], *F. Spani*[A,B,C] *and M. Scalici*[A]

[A]Department of Sciences, University of Rome 'Roma Tre', Viale Guglielmo Marconi 446, I-00146 Roma, Italy.

[B]Departmental Faculty of Medicine and Surgery, Università Campus Bio-Medico di Roma, Unit of Diagnostic Imaging, Via Alvaro del Portillo 21, I-00128 Roma, Italy.

[C]Corresponding author. Email: federica.spani@uniroma3.it

[1]These authors contributed equally to present work.

Table S1. List of articles for toxicological and environmental assessment involving *Hydra vulgaris*

For each article several information has been recorded: chemicals or samples analysed (What is analysed); what is investigated (acute toxicity, chronic toxicity, exposure, teratogenicity); which biomarkers have been observed (Biomarker observed); references for the applied protocol (last column)

Ref. number	Article	What is analysed	What is investigated				Biomarker observed	Available references in M&M for the protocol of the assays
			Acute tox.	Chronic tox.	Exp.	Terat.		
1	Ambrosone *et al*. 2012	CdTe quantum dots		X			growth rate; adult polyp morphology; regeneration morphology; cellular proliferation; molecular analysis	Bosch and David 1984; modified Wilby 1988; Gavrieli *et al*. 1992; Livak and Schmittgen 2001
2	Ambrosone *et al*. 2014	SiO_2 nanoparticles	X				growth rate; adult polyp morphology; feeding behaviour; regeneration morphology; cellular proliferation; molecular analysis	Bosch and David 1984; Ambrosone *et al*. 2012; David 1973; Livak and Schmittgen 2001
3	Ambrosone *et al*. 2017	CdSe/ZnS quantum dots	X				growth rate; adult polyp morphology; regeneration morphology	Johnson *et al*. 1982; Wilby 1988
4	Brown *et al*. 2014	Effect of clays for detoxification of mycotoxins	X				adult polyp morphology	modified Wilby 1988
5	Cera *et al*. 2020	Riverine samples				X	regeneration morphology	modified Wilby 1988
6	Hearon *et al*. 2020	Effects of clay-based sorbents for detoxification	X				adult polyp morphology	Wilby 1988; Brown *et al*. 2014
7	Huarachi and Gonzalez 2012	Riverine samples	X				adult polyp morphology	Pachura-Bouchet *et al*. 2006; Castro *et al*. 2002
8	Kar and Aditya 2007	CdCl2	X				adult polyp morphology	not available (the authors compare the LC50 Probit Analysis and a morphological scoring procedure)
9	Lekamge *et al*. 2018	Ag nanoparticles	X				adult polyp morphology	Trottier *et al*. 1997
10	Marchesano *et al*. 2015	Carbon Nano-Onions	X				adult polyp morphology	modified Wilby 1988
11	Murugadas *et al*. 2016	Copper oxide nanorod	X				growth rate; adult polyp morphology; feeding behaviour; regeneration morphology;	Trottier *et al*. 1997; Ambrosone *et al*. 2012; Ambrosone *et al*. 2014; Buzgariu *et al*. 2014;

Ref. number	Article	What is analysed	What is investigated Acute tox.	Chronic tox.	Exp.	Terat.	Biomarker observed	Available references in M&M for the protocol of the assays
							cellular proliferation; molecular analysis	Jantzen *et al*. 1998; Keston and Brandt 1965; Kovačević *et al*. 2007; Cikala *et al*. 1999
12	Murugadas *et al*. 2019	Bisphenol A	X				adult polyp morphology; feeding behaviour; regeneration morphology	Murugadas *et al*. 2016; Ambrosone *et al*. 2012 ; Ambrosone *et al*. 2014;
13	Singh and Nel 2017	Riverine samples	X				adult polyp morphology	Trottier *et al*. 1997; Holdway, 2005; Arkhipchuk *et al*. 2006; Wilby 1988; Blaise and Kusui 1997; Quinn *et al*. 2009; Persoone *et al*. 2003
14	Sundaram *et al*. 2015	Fluoxetine, paroxetinex and citalopram (serotonin reuptake inhibitors) at different pH	X				adult polyp morphology	not available (the authors monitor the survival rate)
15	Traversetti *et al*. 2017	Riverine samples				X	regeneration morphology	modified Wilby 1988
16	Wang *et al*. 2017	Effect of enterosorbents to lower toxicity	X				adult polyp morphology	Brown *et al*. 2014
17	Wang *et al*. 2019	Effect of clays to reduce chemical exposures	X				adult polyp morphology	Brown *et al*. 2014
18	Yamindago *et al*. 2018	Zinc oxide nanoparticles	X				adult polyp morphology, regeneration morphology, histology; molecular analysis	not available for morphology (tha authors use the LC50 and Probit Analysis)
19	Zeeshan *et al*. 2017	Co	X				growth rate; adult polyp morphology; feeding behaviour; regeneration morphology; histology; cell proliferation; molecular analysis	modified Wilby 1988; Marchesano *et al*. 2015; Ambrosone *et al*. 2012; Bosch and David 1984; Ambrosone *et al*. 2014; Zeeshan *et al*. 2016; Buzgariu *et al*. 2014; Buzgariu *et al*. 2008; Technau *et al*. 2003

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