

Additions and Corrections

2007, Volume 41, Pages 4821–4828

David B. Buchwalter,* Daniel J. Cain, William H. Clements, and Samuel N. Luoma: Using Biodynamic Models to Reconcile Differences between Laboratory Toxicity Tests and Field Biomonitoring with Aquatic Insects

Values for [Cd]year ($\mu\text{g}\cdot\text{g}^{-1}$) and DSCI are corrected from the published version. We had previously concluded “Biodynamic parameters suggest that the dissolved route of exposure is not likely to result in high concentrations of Cd in potentially sensitive compartments in this taxon, so the limited responses to metal exposures in mesocosm exposures by *R. hagenii* is somewhat surprising.” This corrected version suggests that the dissolved route of exposure could be important in this taxon. This correction helps to reconcile differences between the field and mesocosm experiments.

TABLE 2. Derivation of a Dissolved Cd Sensitivity Index^a

taxon	k_u ($\text{L}\cdot\text{g}^{-1}\cdot\text{d}^{-1}$)	k_e (d^{-1})	k_u/k_e	[Cd] ss ($\mu\text{g}\cdot\text{g}^{-1}$)	Tss (days)	[Cd]year ($\mu\text{g}\cdot\text{g}^{-1}$)	DCSI
<i>Rhithrogena morrisoni</i>	0.054 ± 0.007	0.001 ± 0.001^b	54 000	27.9	5588	8.26	1.31
<i>Ephemerella excrucians</i>	0.554 ± 0.040	$0.014 \pm 0.021^*$	39 593	20.5	399	19.68	9.58
<i>Rhyacophila</i> sp.	0.042 ± 0.007	0.137 ± 0.014	309	0.2	41	0.15	0.05

^a The ratio of the uptake rate constant (k_u) to the efflux rate constant (k_e) was used to assess the relative steady state concentration of Cd in insect tissues relative to the dissolved Cd concentration. Steady-state concentrations and the time required to reach steady state were calculated from these rate constants assuming a dissolved Cd concentration of $0.5 \mu\text{g Cd/L}$. Cd concentrations predicted to accumulate in larvae over 1 year were modified to only consider Cd associated with potentially metal-sensitive fractions (Table 3). ^b A k_e value of 0.001 was assigned to *R. morrisoni* for modeling purposes.

ES703130E

10.1021/es703130e

Published on Web 03/15/2008

2007, Volume 41, Pages 8129–8134

Guodong Liu, Ying-Ying Lin, Hong Wu, and Yuehe Lin*: Voltammetric Detection of Cr(VI) with Disposable Screen-Printed Electrode Modified with Gold Nanoparticles

The manuscript was withdrawn from publication by the corresponding author. The basis for withdrawal was a violation of the *Ethical Guidelines to Publication of Chemical Research* by the American Chemical Society. There was an inaccuracy associated with Figure 1b, as undisclosed modifications were made to the figure by one of the authors, who was a previous postdoctoral fellow in this research group.

ES800413U

10.1021/es800413u

Published on Web 03/18/2008