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ERRATUM

Erratum to: Can ligand addition to soil enhance Cd phytoextraction? A mechanistic model study

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In the paper "Can ligand addition to soil enhance Cd phytoextraction? A mechanistic model study" by Zhongbing Lin, André Schneider, Christophe Nguyen, and Thibault Sterckeman published in the Environmental Science and Pollution Research (November 2014, Volume 21, Issue 22, pp 12811-12826; http://dx.doi.org/10.1007/s11356-014-3218-8), there were nine typesetting mistakes and two other errors which must be corrected as follows.

Page 12813, Eq. (1) must be replaced by

$$M + L \underset{k_d^{ML}}{\overset{k_a^{M,L}}{\rightleftarrows}} ML \quad (1)$$

Page 12813, Column 2, comas should be added to Line 1 so the beginning of the sentence reads
"In Eq. (2), [*Cd*], [*Ca*], [*L*], [*CdL*] and [*CaL*] represent the concentrations…"

The online version of the original article can be found at http://dx.doi.org/10.1007/s11356-014-3218-8.

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Page 12813, Eq. (5) must be replaced by

$$\left\{\begin{array}{c}\theta\frac{\partial}{\partial t}[Cd]=\frac{1}{r}\frac{\partial}{\partial r}\left(rf\theta D_{\mathrm{Cd}}\frac{\partial}{\partial r}[Cd]+r_0v_0[Cd]\right)+\theta\left(k_{\mathrm{d}}^{\mathrm{CdL}}[CdL]-k_{\mathrm{a}}^{\mathrm{Cd,L}}[Cd][L]\right)+\left(k_{\mathrm{des}}\{CdS\}-\theta k_{\mathrm{ads}}[Cd]\right)\\ (\theta+b_{\mathrm{L}})\frac{\partial}{\partial t}[CdL]=\frac{1}{r}\frac{\partial}{\partial r}\left(rf\theta D_{\mathrm{L}}\frac{\partial}{\partial r}[CdL]+r_0v_0[CdL]\right)+\theta\left(k_{\mathrm{a}}^{\mathrm{Cd,L}}[Cd][L]-k_{\mathrm{d}}^{\mathrm{CdL}}[CdL]\right)\\ (\theta+b_{\mathrm{Ca}})\frac{\partial}{\partial t}[Ca]=\frac{1}{r}\frac{\partial}{\partial r}\left(rf\theta D_{\mathrm{Ca}}\frac{\partial}{\partial r}[Ca]+r_0v_0[Ca]\right)+\theta\left(k_{\mathrm{d}}^{\mathrm{CaL}}[CaL]-k_{\mathrm{a}}^{\mathrm{Ca,L}}[Ca][L]\right)\\ (\theta+b_{\mathrm{L}})\frac{\partial}{\partial t}[CaL]=\frac{1}{r}\frac{\partial}{\partial r}\left(rf\theta D_{\mathrm{L}}\frac{\partial}{\partial r}[CaL]+r_0v_0[CaL]\right)+\theta\left(k_{\mathrm{a}}^{\mathrm{Ca,L}}[Ca][L]-k_{\mathrm{d}}^{\mathrm{CaL}}[CaL]\right)\\ (\theta+b_{\mathrm{L}})\frac{\partial}{\partial t}[L]=\frac{1}{r}\frac{\partial}{\partial r}\left(rf\theta D_{\mathrm{L}}\frac{\partial}{\partial r}[L]+r_0v_0[L]\right)+\theta\left(k_{\mathrm{d}}^{\mathrm{CdL}}[CdL]-k_{\mathrm{a}}^{\mathrm{Cd,L}}[Cd][L]\right)+\theta\left(k_{\mathrm{d}}^{\mathrm{CaL}}[CaL]-k_{\mathrm{a}}^{\mathrm{Ca,L}}[Ca][L]\right)\\ \frac{\partial}{\partial t}\{CdS\}=\theta k_{\mathrm{ads}}[Cd]-k_{\mathrm{des}}\{CdS\}\end{array}\right\} \quad (5)$$

Page 12813, the equation number of Eq. (9) must be added

$$J[Cd,CdL,Ca,CaL,L,CdS]=\left\{\begin{array}{ll}\left[-\frac{I_{\max}[Cd]}{K_m+[Cd]},-TSCFv_0[CdL],0,0,-TSCFv_0[L],0\right] & r=r_0\quad t\geq 0\\ [0,0,0,0,0,0] & r=r_1\quad t\geq 0\end{array}\right\} \quad (9)$$

Page 12817, Eq. (27) must be replaced by

$$\max(0.01,\ 0.9943\theta-0.1722)<f<1.3268\theta+0.0022 \quad (27)$$

Page 12818, Eq. (28) must be replaced by

$$\left\{\begin{array}{c}\beta_1=\frac{[Cd]_0}{[Cd]_{0\_C}}=\frac{\theta+b_{\mathrm{Cd}}}{(\theta+b_{\mathrm{Cd}})+(\theta+b_{\mathrm{L}})K_{\mathrm{S}}^{\mathrm{CdL}}[L]_0}\\ \beta_2=\frac{[Cd]_0+[CdL]_0}{[Cd]_{0\_C}}=\frac{(\theta+b_{\mathrm{Cd}})\left(1+K_{\mathrm{S}}^{\mathrm{CdL}}[L]_0\right)}{(\theta+b_{\mathrm{Cd}})+(\theta+b_{\mathrm{L}})K_{\mathrm{S}}^{\mathrm{CdL}}[L]_0}\\ \beta_3=\frac{(\theta+b_{\mathrm{L}})[CdL]_0}{\{CdS\}_0}\end{array}\right\} \quad (28)$$

Page 12818, Column 2, the beginning of the sentence in Line 1 must be replaced by

"The mean concentrations of Cd^{2+} ($\overline{[Cd]_{\mathrm{r0}}}$) and CdL ($\overline{[CdL]_{\mathrm{r0}}}$) in solution…"

Page 12818, Eq. (29) must be replaced by

$$\left\{\begin{array}{ll}\overline{[Cd]_{\mathrm{r0}}}=\frac{1}{T}\int_0^T[Cd]dt & \\ \overline{[CdL]_{\mathrm{r0}}}=\frac{1}{T}\int_0^T[CdL]dt & r=r_0\end{array}\right\} \quad (29)$$

Page 12818, Eq. (30) must be replaced by

$$\Delta_{\mathrm{CdL}}=k_{\mathrm{d}}^{\mathrm{CdL}}\overline{[CdL]_{\mathrm{r0}}} \quad (30)$$

Page 12818, Eq. (31) must be replaced by

$$\left\{\begin{array}{ll}E_{\mathrm{CdL}}=\frac{1}{K_{\mathrm{S}}^{\mathrm{CdL}}}\frac{1}{T}\int_0^T\frac{[CdL]}{[Cd][L]}dt & \\ E_{\mathrm{CdS}}=\frac{1}{b_{\mathrm{Cd}}}\frac{1}{T}\int_0^T\frac{\{CdS\}}{[Cd]}dt & r=r_0\end{array}\right\} \quad (31)$$

Page 12, the caption of Fig. 5 must be replaced by

"**Fig. 5** Empirical cumulative distribution function (ECDF) of log10-equilibrium indicators of complexation ($\log_{10}(E_{\mathrm{CdL}})$) and sorption kinetics ($\log_{10}(E_{\mathrm{CdS}})$) at root surface in scenarios S + H and S + L"