

ECOTOXICOLOGY

Review Article

- 1 Evaluation of engineered nanoparticle toxic effect on wastewater microorganisms: Current status and challenges**
S. Eduok, B. Martin, R. Villa, A. Nocker, B. Jefferson and F. Coulon

Regular Articles

- 10 Biomagnification of DDT and its metabolites in four fish species of a tropical lake**
Ermias Deribe, Bjørn Olav Rosseland, Reidar Borgstrøm, Brit Salbu, Zinabu Gebremariam, Elias Dadebo, Lindis Skipperud and Ole Martin Eklo
- 19 Comparison of intermittent and continuous exposures to cadmium in the blue mussel, *Mytilus edulis*: Accumulation and sub-lethal physiological effects**
Dokuboba Amachree, A. John Moody and Richard D. Handy
- 27 Phytotoxicity assessment of a methanolic coal dust extract in *Lemna minor***
Nadia Coronado-Posada, Maria Cabarcas-Montalvo and Jesus Olivero-Verbel
- 33 Pseudo-basal levels of and distribution of anti-oxidant enzyme biomarkers in *Eisenia fetida* and effect of exposure to phenanthrene**
Zhiming Shi, Li Xu, Nan Wang, Wei Zhang, Huixin Li and Feng Hu
- 39 Dose-dependent reactions of *Aporrectodea caliginosa* to perfluorooctanoic acid and perfluorooctanesulfonic acid in soil**
Parva Zareitalabad, Jan Siemens, Florian Wichern, Wulf Amelung and Rainer Georg Joergensen
- 44 Cytoprotective and antioxidant effects of the edible halophyte *Sarcocornia perennis* L. (swampfire) against lead-induced toxicity in renal cells**
Manel Gargouri, Christian Magné, Xavier Dauvergne, Riadh Ksouri, Abdelfattah El Feki, Marie-Agnès Giroux Metges and Hélène Talarmin
- 52 A new protocol for ecotoxicological assessment of seawater using nauplii of *Tisbe biminiensis* (Copepoda:Harpacticoida)**
Beatriz R.B.O. Lavorante, Deloar D. Oliveira, Bruno V.M. Costa and Lília P. Souza-Santos
- 60 Histopathological effects of 2,2',4,4'-tetrabromodiphenyl ether (BDE-47) in the gills, intestine and liver of turbot (*Psetta maxima*)**
Silvia Barja-Fernández, Jesús M. Míguez and Rosa Álvarez-Otero
- 69 Antioxidant and oxidative stress parameters in brain of *Heteropneustes fossilis* under air exposure condition; role of mitochondrial electron transport chain**
Biswaranjan Paital
- 78 Contaminants in indigenous harvests of apex predators: The Tasmanian Short-tailed Shearwater as a case study**
Jennifer L. Lavers and Alexander L. Bond
- 83 The toxicity of cadmium to three aquatic organisms (*Photobacterium phosphoreum*, *Daphnia magna* and *Carassius auratus*) under different pH levels**
R.-J. Qu, X.-H. Wang, M.-B. Feng, Y. Li, H.-X. Liu, L.-S. Wang and Z.-Y. Wang

- 91 **Imidacloprid induced alterations in enzyme activities and energy reserves of the land snail, *Helix aspersa***
M.A. Radwan and M.S. Mohamed
- 98 **Combined toxicity of pesticide mixtures on green algae and photobacteria**
Shu-Shen Liu, Cheng-Lin Wang, Jin Zhang, Xiang-Wei Zhu and Wei-Ying Li
- 104 **Influence of elevated alkalinity and natural organic matter (NOM) on tissue-specific metal accumulation and reproductive performance in fathead minnows during chronic, multi-trophic exposures to a metal mine effluent**
Jacob D. Ouellet, Monique G. Dubé and Som Niyogi
- 113 **Contamination profile of DDT and HCH in surface sediments and their spatial distribution from North-East India**
Kumkum Mishra, Ramesh C. Sharma and Sudhir Kumar
- 123 **Evaluation of biochemical markers in the golden mussel *Limnoperna fortunei* exposed to glyphosate acid in outdoor microcosms**
María Mercedes Iumato, Eugenia Di Fiori, Sebastián Eduardo Sabatini, Luis Claudio Cacciatore, Adriana Cristina Cochón, María del Carmen Ríos de Molina and Ángela Beatriz Juárez
- 130 **Characterization and environmental risk assessment of heavy metals found in fly ashes from waste filter bags obtained from a Chinese steel plant**
Yun Zhou, Xun-an Ning, Xikai Liao, Meiqing Lin, Jingyong Liu and Jianghui Wang
- 137 **Effects of peak exposure scenarios on *Gammarus fossarum* using field relevant pesticide mixtures**
Mirco Bundschuh, Jochen P. Zubrod, Patricia Klemm, David Elsaesser, Christoph Stang and Ralf Schulz
- 144 **Irrigation with industrial wastewater activates antioxidant system and osmoprotectant accumulation in lettuce, turnip and tomato plants**
H.A. Hashem, R.A. Hassanein, M.H. El-Deep and A.I. Shouman
- 153 **Attic dust assessment near a wood treatment plant: Past air pollution and potential exposure**
Mariana Vieira Coronas, Jovana Bavaresco, Jocelita Aparecida Vaz Rocha, Ana Maria Geller, Elina Bastos Caramão, Maria Lúcia Kolowski Rodrigues and Vera Maria Ferrão Vargas
- 161 **Amendment in phosphorus levels moderate the chromium toxicity in *Raphanus sativus* L. as assayed by antioxidant enzymes activities**
D. Sayantan and Shardendu
- 171 **Toxicological assessment of heavy metals accumulated in vegetables and fruits grown in Ginfel river near Sheba Tannery, Tigray, Northern Ethiopia**
Abraha Gebrekidan, Yirgaalem Weldegebriel, Amanual Hadera and Bart Van der Bruggen
- 179 **Vermicomposting of toxic weed – *Lantana camara* biomass: Chemical and microbial properties changes and assessment of toxicity of end product using seed bioassay**
Surindra Suthar and Priyanka Sharma
- 188 **Evaluation of biochemical and redox parameters in rats fed with corn grown in soil amended with urban sewage sludge**
Denise Grotto, Maria Fernanda Hornos Carneiro, Elisa Sauer, Solange Cristina Garcia, Wanderley José de Melo and Fernando Barbosa Jr.
- 195 **Fast determination of fish mineral profile. Application to Vietnamese panga fish**
M. Ruiz-de-Cenzano, U. Beser, M.L. Cervera and M. de la Guardia
- 202 **Ecological risk assessment of impacted estuarine areas: Integrating histological and biochemical endpoints in wild Senegalese sole**
Cátia Gonçalves, Marta Martins, Maria H. Costa, Sandra Caeiro and Pedro M. Costa

ENVIRONMENTAL CHEMISTRY

Regular Articles

- 212 **Prediction of the distribution coefficients of metals in Amazonian soils**
Anderson Martins de Souza Braz, Antonio Rodrigues Fernandes, José Roberto Ferreira and Luís Reynaldo Ferracciú Alleoni
- 221 **Predicting acute aquatic toxicity of structurally diverse chemicals in fish using artificial intelligence approaches**
Kunwar P. Singh, Shikha Gupta and Premanjali Rai

- 234 **Toxic responses and antioxidative enzymes activity of *Scenedesmus obliquus* exposed to fenhexamid and atrazine, alone and in mixture**
Jelan Mofeed and Yahia Y. Mosleh
- 241 **Substituent contribution to the genotoxicity of benzophenone-type UV filters**
Huimin Zhao, Dongbin Wei, Min Li and Yuguo Du

ENVIRONMENTAL SAFETY

Regular Article

- 247 **Persistence and effect of processing on chlorpyrifos residues in tomato (*Lycopersicon esculantum* Mill.)**
Mamta Rani, Sunayana Saini and Beena Kumari