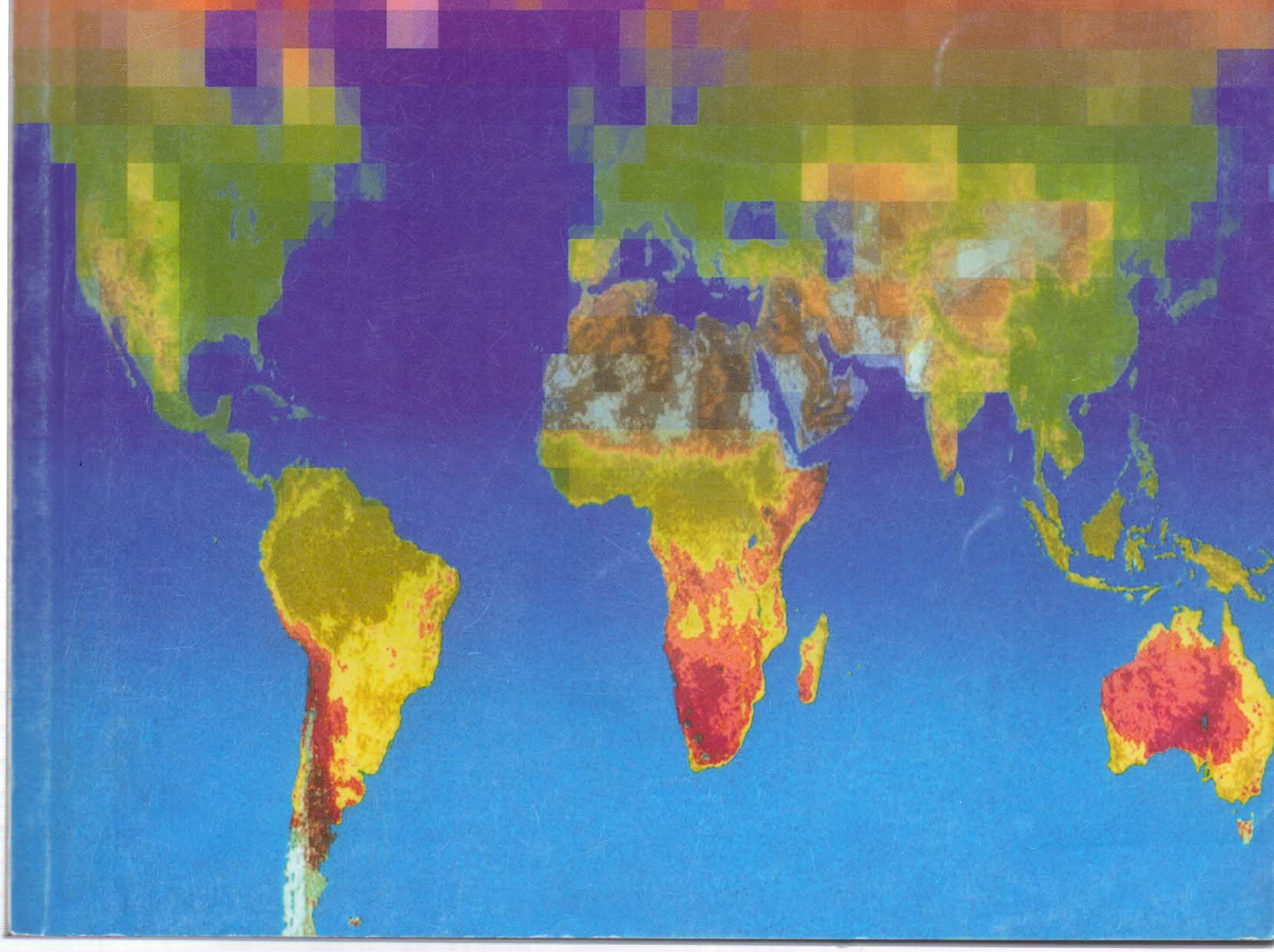
Volume 143 No. 2 September 2006 ISSN 0269-7491

ELSEVIER

ENVIRONMENTAL POLLUTION



ENVIRONMENTAL
POLLUTION
www.elsevier.com/locate/envpol

CONTENTS

Volume 143 Number 2 2006

187 **Evidence for declining levels of heavy-metals in the Severn Estuary and Bristol Channel, U.K. and their spatial distribution in sediments**
S. Duquesne, L.C. Newton, L. Giusti, S.B. Marriott, H.-J. Stärk, D.J. Bird

Heavy-metal contamination in Severn Estuary sediments is declining but shows seasonal variation and depends on location and sediment type.

197 **Distribution of soil arsenic species, lead and arsenic bound to humic acid molar mass fractions in a contaminated apple orchard**
K. Newton, D. Amarasiriwardena, B. Xing

The distribution of arsenic species [i.e., As (III), As (V), and methylated arsenic species (DMA, MMA)] on the soil surface and in a depth profile as well as those associated with humic acids is discussed.

206 **Procedures of trophic chain samples preparation for determination of triazines by HPLC and metals by ICP-AES methods**
I. Baranowska, H. Barchańska, E. Pacak

Methods for analysis of triazine herbicides and metals were determined.

212 **Detection of Copper(II) and zinc(II) binding to humic acids from pig slurry and amended soils by fluorescence spectroscopy**
D. Hernández, C. Plaza, N. Senesi, A. Polo

Pig-slurry application to soil decreased Cu(II) and Zn(II) binding affinities of soil humic acids.

221 **Cu and Zn adsorption onto non-residual and residual components in the natural surface coatings samples (NSCSs) in the Songhua River, China**
Y. Li, X. Wang, S. Guo, D. Dong

Oxides were the most important component controlling metals in an aquatic environment.

228 **Modelling trace metal partitioning in forest floors of northern soils near metal smelters**
J.D. MacDonald, W.H. Hendershot

The solid–solution partitioning of trace metals in forest floors contaminated by smelter emissions can be modelled using a single set of model parameters for soil organic matter.

241 **Optimization of an effective extraction procedure for the analysis of microcystins in soils and lake sediments**
W. Chen, L. Li, N. Gan, L. Song

Efficiency of extraction of microcystins from soil and sediment was greatly increased.

247 **Nitrification in polluted soil fertilized with fast- and slow-releasing nitrogen: A case study at a refinery landfarming site**
R. Peltola, M. Salkinoja-Salonen, J. Pulkkinen, M. Koivunen, A.-R. Turpeinen, T. Aarnio, M. Romantschuk

Nitrification occurs in soil containing high concentration of aged oil.

254 **Arsenic chemistry in the rhizosphere of *Pteris vittata* L. and *Nephrolepis exaltata* L.**
M.I. Silva Gonzaga, J.A.G. Santos, L.Q. Ma

Plant arsenic uptake altered arsenic distribution in different fractions in the rhizosphere soil.

261 **Effective remediation of grossly polluted acidic, and metal-rich, spoil heap drainage using a novel, low-cost, permeable reactive barrier in Northumberland, UK**
A.P. Jarvis, M. Moustafa, P.H.A. Orme, P.L. Younger

A novel, low-cost, permeable reactive barrier can successfully remediate the worst quality coal spoil heap drainage in the UK.

269 **Antimicrobial-resistant patterns of *Escherichia coli* and *Salmonella* strains in the aquatic Lebanese environments**
S. Harakeh, H. Yassine, M. El-Fadel

First report of antibiotic resistance in bacteria in the environment in Lebanon.

continued on inside back cover

(Abstracted/indexed in: AGRICOLA database; Air Pollution Control Association Journal; Biological and Agricultural Index; CAB ABSTRACTS database; Elsevier BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts; Chemical Abstracts; Current Contents/ Agriculture, Biology & Environmental Sciences; Environment Abstracts; Environmental Periodicals Bibliography; Energy Information Abstracts; EMBASE/Excerpta Medica; Geo Abstracts; GEOBASE; Index Medicus/MEDLINE/PubMed; ISI GeoSciTech; Science Citation Index; SciSearch)

0269-7491(200609)143:2;1-R

ELSEVIER

02022