

CONTENTS

<i>Hans-Peter Liebig</i> Welcome address to the Third Hohenheim Workshop on Bioindication	9
<i>Peter Necker</i> Opening of the Third Workshop on Bioindication	11
<i>Andreas Klumpp</i> Bioindication and air quality in European cities – an introduction	13

ORAL PRESENTATIONS

<i>Frank de Leeuw</i> European urban air quality – past, present and future	19
<i>Nick Chaplin, Teemu Virtanen, Pavel Mladonicky</i> Urban air quality management – current issues	29
<i>Andreas Klumpp, Gabriele Klumpp, Wolfgang Ansel, Anette Fomin</i> European network for the assessment of air quality by the use of bioindicator plants – the first year of EuroBionet	37
<i>Jean Pierre Garrec, Shang He, Christophe Rose, Franck Radnai</i> Plant biomonitoring of air pollution in urban areas: examples of some French cities and Beijing (P.R. China)	57
<i>Alfred E. G. Tonneijck, Chris J. Van Dijk, Tom A. Dueck</i> Plant monitoring of air quality around waste incinerators	67
<i>Willfried Nobel</i> Standardisation of bioindication methods in Germany – status quo and prospects	77
<i>Maria-José Sanz</i> Efforts of standardisation of ozone bioindication in Europe	87
<i>Ludwig Radermacher, Georg H. M. Krause</i> Bioindication and air quality control – case studies from Germany	95
<i>Gerhard Soja, Peter Schafner, Martin Gerzabek</i> Bioindicator plants as monitoring tools for urban and industrial pollutant sources – case studies from Austria	105

Hans-Ulrich Hahn, Reinhard Kostka-Rick

Biomonitoring of VOC emissions from the coating process at DaimlerChrysler – an inside view of motivation factors	119
--	-----

Michiel van Peteghem

Environmental communication as part of target group policy	131
--	-----

Jürgen Häusler

Do good and talk about it. Communicating news about public projects	132
---	-----

Olivier Laurent

EuroBionet – Project exhibitions in Lyon	133
--	-----

Hans-Jürgen Gutsche

Marketing and sponsoring of an environmental project – the experience made with EuroBionet in Klagenfurt	137
---	-----

Natalie Belluzzo, Stefano Oliboni, Stefano Pisani, Riccardo Tardiani

The marketing of a European idea in an urban context	138
--	-----

Sven Baerwalde

GLOBE – A school project with special reference to science, education and environment	139
--	-----

*Wolfgang Ansel, Andreas Klumpp, Gabriele Klumpp, Fritz Häffelein, Barbara Rünz,
Bernd Nicolai, Christel Dietze, Peter Schäfer, Jan Fleisch, Anton Schühle*

“Applied science for the next generation” – The school project in Ditzingen	141
---	-----

POSTERS

Ivano Fumagalli, Lorella Mignanego, Luca Sormani

Experiences of air quality monitoring in Northern Italy	149
---	-----

Fausto Manes, Francesca Capogna, Maria Antonietta Giannini, Valerio Silli

Analysis of environmental quality by means of bioindication and biomonitoring studies on plant species	153
---	-----

*Fausto Manes, Francesca Capogna, Mirella Di Giovine, Eugenio Donato,
Maria Antonietta Giannini*

Biomonitoring studies in Rome by clover clones kit	161
--	-----

Giacomo Lorenzini, Chiara Pucciariello, Cristina Nali

Physiological responses of white clover clones to ozone in the 2000 ICP-Crops experiment	167
---	-----

<i>Gunilla Pihl Karlsson, Per Erik Karlsson, Helena Danielsson, Håkan Pleijel</i> Impact of day-time and/or night-time ozone exposure on visible injury and leaf conductance of subterranean clover, <i>Trifolium subterraneum</i>	173
<i>Christoph Hafner, Klaus Jung, Reinhard Kostka-Rick, Hans-Ulrich Hahn, Gerrit Schüürmann</i> Nitrogen metabolism as effect parameter for air pollution in plant bioindicators – a ¹⁵ N-tracer study	181
<i>Evelyn Schmidt, Christoph Hafner, Klaus Jung, Gerrit Schüürmann</i> Effects of atmospheric TCA on nitrogen metabolism of C ₃ - and C ₄ -plants	187
<i>Reinhard Kostka-Rick, Jürgen Bender, Elke Bergmann, Hans-Joachim Weigel</i> Symptoms of ozone-induced foliar injury on horticultural crops	191
<i>Mario Virano, Guido Badino, Marco Orsi, Giorgio Ostacoli, Vincenzo Zelano, Daniela Gastaldi, Alessandra Parodi</i> AQB – Air Quality Biomonitoring. An innovative and standardized approach for the evaluation of traffic pollutant diffusion in the environment	197
<i>Gerardo Coria, Hebe A. Carreras, Claudia M. González, Gustavo L. Gudiño, Eduardo D. Wannaz, María Luisa Pignata</i> Response of a lichen and two epiphytic vascular species as indicators of air pollution ...	203
<i>María Luisa Pignata, Eduardo D. Wannaz, María Soledad Martínez, Gloria Caminotti</i> Evaluation of <i>Tillandsia capillaris</i> Ruiz & Pav. f. <i>capillaris</i> as biomonitor of atmospheric pollution in Argentina	209
<i>Natalie Belluzzo, Stefano Oliboni, Stefano Pisani, Serena Rossi, Riccardo Tardiani</i> The experience of Verona after one year of activity in the EuroBionet project	215
<i>Angela Ribas, Josep Peñuelas</i> Ozone bioindication in Barcelona and surrounding area of Catalonia	221
<i>Walter Erhardt, Markus Finck, Jürgen Franzaring, Rolf Herzig, Volker John, Ulrich Kirschbaum, Reinhard Kostka-Rick, Willfried Nobel, Ludwig Peichl, Ludwig Radermacher, Dieter Reiml, Roman Türk, Volkmar Wirth, Ralf-Dieter Zimmermann</i> Standardisation and biological indication	227
<i>Harald Bartholmeß</i> Biological long-term observation of air pollution – lichen mapping as part of the environmental monitoring Esslingen/Altbach (Germany) 1983–1998	231

<i>Jutta Köhler, Ludwig Peichl</i> Bioindication with tobacco plants and grass culture at a long-term station in the city of Munich, Germany	237
<i>Reinhard Kostka-Rick</i> Ozone biomonitoring in a local network around an automotive plant	243
<i>Andreas Klumpp, Márcia Dias da Silva, Marisa Domingos</i> Biomonitoring of air pollution in a mixed industrial/residential district in the region of Greater São Paulo, Brazil	249
<i>Walter Maier, Dieter Pirker, Thomas Pongratz, Andreas Schopper, Iris Waikinat</i> Biomonitoring of air pollution by organic compounds in the city of Graz and the industrial area of Leoben-Donawitz	259
<i>Jean-François Castell, Dominique Maronnier</i> Biomonitoring of ozone: A tool to initiate the young people into the scientific method and air pollution impacts	265
<i>Jean Pierre Garrec, Christophe Rose, Franck Radnai</i> Bio-Station and sentinel plants – A new method for the assessment of air quality by the population	271
<i>Nicolaos I. Sifakis</i> A proposal to use satellite-based air pollution mapping for standardising the siting of bioindicators	275
<i>Kerstin Lübke, Horst Tresp</i> Chlorophyll fluorescence of epiphytic lichens under acid, ammonium and fungicide stress – a comparison of laboratory and field results	279
List of Participants	287
Subject Index	293
Author Index	295