

Contents

Foreword	9
Preface: Studies on ecological succession contribute to ecological theory and provide a basis for ecological restoration (K. Prach)	11
Acknowledgements	14
Industrial deposits of abandoned sedimentation basins – technology of the origin and vegetation (P. Kovář)	15
Plant species diversity in the biotopes of unreclaimed industrial deposits as artificial islands in the landscape (J. Vaňková, P. Kovář)	30
Genesis and characteristics of orewaste sulphate soils at Chvaletice (O. Rauch)	46
Microsite versus dispersal limitation in primary succession: a case study from an abandoned ore-washery sedimentation basin (M. Jiráčková, P. Dostál) ...	59
Influence of toxic substrates of the abandoned sedimentation basins on chromosome apparatus of vascular plants (V. Jarolímová)	77
Response of <i>Phragmites australis</i> to heavy metal loaded habitats (P. Zákřavský, Z. Hroudová and O. Rauch)	83
Occurrence and ecology of arbuscular mycorrhizal fungi in substrates of abandoned industrial sedimentation basins (B. Enkhtuya, J. Rydlová and M. Vosátka)	98
Dung microcosms as another source of fungal biodiversity on areas with industrial deposits (M. Váňová, A. Kubátová)	121
Soil microfungi associated with the roots of <i>Calamagrostis epigejos</i> , an expansive plant abundant in abandoned sedimentation basin in Chvaletice (E. Požárová)	132
Degradation of plant litter and cellulose by microscopic fungi in an abandoned sedimentation basin (K. Spěváková)	147

Decomposition of organic matter on different substrates – laboratory study (M. Kovářová, T. Frantík)	153
Species diversity of parasitic fungi on plants colonizing toxic substrates (J. Marková)	176
Diversity and ecology of macrofungi on the abandoned sedimentation basins near Chvaletice and Opatovice (J. Holec)	183
Contribution to the knowledge of soil algae of two abandoned industrial sedimentation basins in Eastern Bohemia (J. Neustupa, P. Škaloud)	194
Lichen and bryophyte species diversity on toxic substrates in the abandoned sedimentation basins of Chvaletice and Bukovina (Z. Palice, Z. Soldán) ...	200
Changes on microsites of the moss <i>Ceratodon purpureus</i> and lichens <i>Peltigera didactyla</i> and <i>Cladonia</i> sp. div. in the abandoned sedimentation basin in Chvaletice (R. Pohlová)	222
The influence of the moss layer on soil surface microclimate in an abandoned ore-washery sedimentation basin (Z. Hroudová, P. Zákřavský)	235
Secondary succession after fire on an abandoned ore-washery sedimentation basin – different trajectories (A comparison with primary succession) (M. Štefánek)	248
Dynamics of the demographic parameters of the clonal plant <i>Calamagrostis</i> <i>epigejos</i> (L.) Roth in two kinds of industrial deposits (Abandoned sedimentation basins in Bukovina and Chvaletice) (I. Bryndová, P. Kovář)	267
Small-scale spatiotemporal dynamics of plant cover during the initial phase of primary succession in an abandoned ore-washery sedimentation basin (P. Kovář, T. Herben)	277
Clonal diversity of <i>Calamagrostis epigejos</i> (L.) Roth in relation to type of industrial substrate and successional stage (P. Kovář, J. Štěpánek and J. Kirschner)	285
Comparison of the growth of dominant trees (<i>Betula pendula</i> , <i>Populus tremula</i>) in primary succession on toxic substrate (J. Mrázek)	294
Interactions between ants and plants during vegetation succession in the abandoned ore-washery sedimentation basin in Chvaletice (I. Jarešová, P. Kovář)	300
Spiders and harvestmen (Arachnida: Araneae, Opiliones) on an abandoned ore-washery sedimentation basin near Chvaletice (M. Řezáč)	311

- Comparison of insect biodiversity after colonization of two different types
of industrial deposits (J. Davidová-Vilímová) 324
- Trends in spontaneous biological renaturation of human-made deposits:
Background for restoring management (P. Kovář) 337
- Abandoned anthropogenic landscapes: Are they potentially multifunctional?
(P. Kovář) 352