

Mires and Peat

Editor Māris Klaviņš

University of Latvia Press

UDK 91+502+55(474.3+438)
Mi 774

Mires and Peat / Ed. Māris Kļaviņš. – Rīga : University of Latvia Press, 2010. – 216 p.

The book has been published with the financial support of the University of Latvia and
the Foundation of Jānis and Elvīra Rutki

Editor: Professor Māris Kļaviņš

Literary editor: Māra Antenišķe

Cover picture by Māris Kļaviņš

Layout and cover design: Andra Liepiņa

© University of Latvia, 2010
© L. Ansone, A. Briede, I. Druvietis, L. Eglīte,
B. Fiałkiewicz-Koziel, T. Gierlach-Hładoń,
L. Kalniņa, M. Kļaviņš, I. Kokorīte, E. Kušķe,
A. Namatēva, O. Nikodemus, B. Palowski,
E. Parele, O. Purmalis, V. Rodinovs,
I. Silamiķele, B. Smieja-Król, G. Spriņģe,
L. Szajdak, J. Szatyłowicz, M. Szczepański,
J. Šīre, Ē. Teirumnieka, E. Teirumnieks,
J. Tjurins, 2010

ISBN 978-9984-45-163-3

Contents

Foreword	7
<i>B. Fiałkiewicz-Kozieł, B. Smieja-Król, B. Palowski</i> Multiproxy Environmental Studies in Poland Using Peatlands	9
<i>I. Druvietis, G. Sprinģe, A. Briede, I. Kokorīte, E. Parele</i> A Comparative Assessment of the Bog Aquatic Environment of the Ramsar Site of Teiči Nature Reserve and North Vidzeme Biosphere Reserve, Latvia	19
<i>A. Namatēva</i> Microlandscapes in the Teiči Bog and the Eiduki Bog, the Austrumlatvija Lowland	41
<i>E. Kušķe, I. Silamiķele, L. Kalniņa, M. Kļaviņš</i> Peat Formation Conditions and Peat Properties: a Study of Two Ombrotrophic Bogs in Latvia	56
<i>I. Silamiķele, O. Nikodemus, L. Kalniņa, O. Purmalis, J. Šīre, M. Kļaviņš</i> Properties of Peat in Ombrotrophic Bogs Depending on the Humification Process	71
<i>I. Silamiķele, O. Nikodemus, L. Kalniņa, E. Kušķe, V. Rodinovs, O. Purmalis, M. Kļaviņš</i> Major and Trace Element Accumulation in Peat from Bogs in Latvia	96
<i>Ē. Teirumnieka, M. Kļaviņš, E. Teirumnieks</i> Major and Trace Elements in Peat from Bogs of East Latvia	115
<i>L. Szajdak, M. Szczepański</i> Impact of Secondary Transformation of Peat-Moorsh Soils on the Process of Purification of Ground Water	125
<i>T. Gierlach-Hładoń, L. Szajdak</i> Physico-Chemical Properties of Humic Acids Isolated from an <i>Eriophorum-Sphagnum</i> Raised Bog	143

<i>L. Szajdak, J. Szatyłowicz</i>	
Impact of Drainage on Hydrophobicity of Fen Peat-Moorsh Soils	158
<i>M. Kļaviņš, J. Šīre</i>	
Variations of Humic Acid Properties within Peat Profiles	175
<i>L. Eglīte, J. Šīre, M. Kļaviņš</i>	
Peat and Its Modification Products as Sorbents for Trace Elements	198
<i>M. Kļaviņš, L. Ansone, J. Tjurins, I. Silamiķele, O. Purmālis</i>	
Differential Thermal Analysis of Peat and Peat Humic Acids in Relation to Their Origin	207