

List of authors	7
Abstract and Key words	9
1. Introduction (Jiří Neustupa)	11
2. Biological soil crusts on natural substrata (Jiří Neustupa)	13
2.1 Description of investigated localities (<i>Ondřej Peksa & Pavel Škaloud</i>)	14
2.2 Species composition of algae and cyanobacteria in biological soil crusts on natural substrata (<i>Pavel Škaloud, Marie Pažoutová, Jana Veselá & Jiří Neustupa</i>)	15
2.3 Species composition of lichens in biological soil crusts on natural substrata (<i>Ondřej Peksa</i>)	19
2.4 Species composition of fungi in biological soil crusts on natural substrata compared with agricultural habitats (<i>Alena Kubátová & Karel Prášil</i>)	22
2.5 Species composition and diversity of bryophytes in biological soil crusts on natural substrata (<i>Zdeněk Soldán</i>)	25
3. Biological soil crusts on anthropogenic substrata – species composition and diversity (Jiří Neustupa)	27
3.1 Description of investigated localities (<i>Jiří Neustupa & Pavel Škaloud</i>)	28
3.2 The abiotic and eco-physiological parameters of biological soil crusts of ash-slag and ore-waste sedimentation basins (<i>Kateřina Černá</i>)	29
3.3 The vegetation overview of investigated sites (<i>Jaroslav Vojta</i>)	32
3.4 Species composition and diversity of algae on anthropogenic substrata (<i>Pavel Škaloud, Jiří Neustupa & Magda Škaloudová</i>)	33
3.5 Species composition and diversity of lichens on anthropogenic substrata (<i>Ondřej Peksa</i>)	38
3.6 Species composition and diversity of fungi on anthropogenic substrata (<i>Alena Kubátová & Karel Prášil</i>)	41
3.7 Species composition and diversity of bryophytes on anthropogenic substrata (<i>Zdeněk Soldán</i>)	45
4. Synanthropic biological soil crusts and the effect of disturbance; design of experiments (Jiří Neustupa & Pavel Škaloud)	51
4.1 Vegetation of the investigated plots at the Chvaletice and Ralsko localities (<i>Jaroslav Vojta</i>)	53
4.2 Species composition and diversity of algae in synanthropic biological soil crusts (<i>Pavel Škaloud & Jiří Neustupa</i>)	54
4.3 Species composition and diversity of lichens and bryophytes in synanthropic biological soil crusts (<i>Ondřej Peksa & Zdeněk Soldán</i>)	59
4.4 Species composition and diversity of fungi in synanthropic biological soil crusts (<i>Alena Kubátová & Karel Prášil</i>)	61
4.5 Ecology of biological soil crusts in relation to mechanical disturbance (<i>Jiří Neustupa & Kateřina Černá</i>)	65
5. Decomposition of birch foliar litter and model cellulose at sites with the synanthropic biological soil crusts (Petrá Bukovská)	69
6. Summary and the conservational management proposals (Jiří Neustupa)	73
7. References	75
Colour plates	81