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Evolution of biological soil crusts during thousands of millions of years of biosphere development of our planet (for detailed legend and explanations see Fig. 25.2); drawing by B. Büdel and F. Spindler

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Biological Soil Crusts: An Organizing Principle in Drylands

 Springer

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Preface

During the last decades, and probably at least partly triggered by the first Ecological Studies volume on this topic (volume 150), biological soil crusts (biocrusts) have quickly gained increasing interest from many audiences, with well above 100 publications per year published during the last few years. Thus, we found that there is now a wealth of new data covering a wide range of different topics on biocrusts and showing that biocrusts can act as “an organizing principle in drylands.” This observation inspired us to use this as the title of this second Ecological Studies volume. This book is divided into seven sections comprising a total of 25 different chapters.

When we selected the authors for the different chapters, we had two intentions in our mind. One was to include many scientists from as many regions of the world as possible, who also used different methodological approaches in order to get a thorough and comprehensive view on the different topics. Second, we also wanted to get a good mixture of younger and well-established researchers. With a total of 61 chapter authors and 28 of them being in the doctoral, postdoc, or associate professor stage, ~46 % of the book authors are in a nonfinal/early stage of their career.

This second book on biological soil crusts would not have been possible without the help of some people in particular, whom we would like to thank here: first of all, we would like to express our sincere thanks to Otto L. Lange, who gave us the opportunity to be editors of this book, who strongly supported us throughout the whole process of development, from the first ideas to the final editions, and who read and gave highly productive feedback to every single chapter of this book. Thank you so much! Second, we also would like to thank all the authors who contributed to the book. We are well aware of the fact that we sometimes asked for rather profound and time-consuming changes during the development of the book chapters. Despite this, all authors remained highly cooperative and motivated, a fact which cannot be taken for granted and which we deeply appreciate. Third, we would like to express our sincere thanks to Dr. Andrea Schlitzberger, who coordinated this biocrust book for Springer. She always was extremely patient and helped

us immediately upon all smaller and larger problems, and it really was a pleasure to work with her. Fourth, we want to thank our supervisors and colleagues, who allowed us to spend so much time and energy on this book and who believed that in the end, we would produce a worthwhile book that would advance this scientific field. Finally, we also would like to express our sincere thanks to our families and partners for their tolerance and support during the endeavor of this second biocrust book.

We sincerely hope this book will help many scientists, land managers, policy makers, and also the environmentally interested public, to receive an overall introduction into the fascinating world of biocrusts and that it will foster many new ideas and scientific projects. Our goal is reached if this book supports understanding of the overall role of biocrusts as an organizing principle in drylands.

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