

CONTENTS

Preface		vii
Chapter 1	From Winogradsky's Column to Contemporary Research Using Bacterial Microcosms <i>Olena Moshynets, Mariia Boretska and Andrew J. Spiers</i>	1
Chapter 2	Soil Heterogeneity Modulates Responses to Multiple Global Environmental Changes in Model Grassland Communities <i>Fernando T. Maestre and James F. Reynolds</i>	29
Chapter 3	Development and Optimisation of an Aquatic Laboratory Microcosm for Ecotoxicological Risk Assessment <i>Bernard Clément, Gaëlle Triffault-Bouchet and Hélène Delhay</i>	59
Chapter 4	Assessment on Transformation of Organic Pollutants in Microcosms: A Review <i>Xuewei Peng and Xianguo Li</i>	85
Chapter 5	Bacterial Evolution in Simple Microcosms <i>Andrew J. Spiers</i>	107
Chapter 6	Ecology and Environmental Side-Effects of Pesticides in Tropical Microcosms <i>M. A. Daam, R. Geber-Corrêa and A. V. Waichman</i>	129
Chapter 7	Floating Dish Microcosms: A Versatile Tool to Study the Development of Biofilm Communities <i>Wolf-Rainer Abraham and Renata Pereira</i>	143
Chapter 8	Cohesion and Sustainability Inside Microcosms: The Role of Semiosis <i>Maria Isabel Aldinhas Ferreira</i>	157
Commentary	A Brief History on Soil Microcosms as an Experimental Apparatus for Biogeochemical Research <i>Kewei Yu and Ronald D. DeLaune</i>	169
Index		179