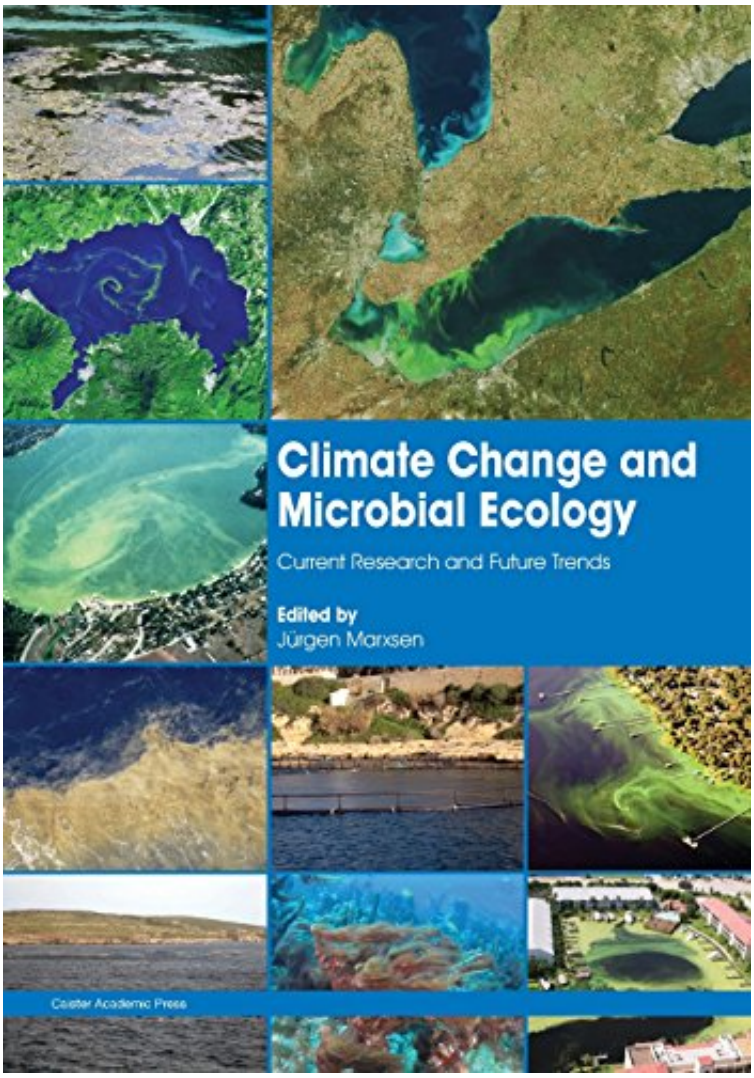
Climate Change and Microbial Ecology: Current Research and Future Trends

From Marxsen Juergen
*ePub | *DOC | audiobook | ebooks | Download PDF*



#6270632 in Books Marxsen Juergen 2016-04-05Original language:EnglishPDF # 1 10.00 x .58 x 7.01l, .81 #File Name: 1910190314214 pagesClimate Change and Microbial Ecology Current Research and Future Trends | File size: 32.Mb

From Marxsen Juergen : Climate Change and Microbial Ecology: Current Research and Future Trends before purchasing it in order to gage whether or not it would be worth my time, and all praised Climate Change and Microbial Ecology: Current Research and Future Trends:

The distribution and function of microorganisms are of crucial importance for the flow of matter in the Earth's

biogeochemical cycles. Effects of microbial communities on the carbon and nitrogen cycles are particularly important for producing climate gases such as CO2, CH4, or N2O. However, the biogeochemical cycles are reversely impacted by global climate change, for example by increasing temperature, increasing CO2 concentration, or changing soil humidity. However microbes may respond differently, by accelerating or by alleviating, human-caused climate change. Understanding of microbial ecology in the different ecosystems on Earth, such as soil, oceans, or inland waters, is essential for our ability to assess the importance of biogeochemical cycles-climate feedbacks. Unfortunately, microbial communities are extremely complex in structure and function and can be affected by climate and other global changes in many ways, which impedes our ability to draw reliable conclusions. In this book, a broad range of renowned scientists reviews the most important hot-topics in the area of climate change and microbial ecology, thus providing a timely and authoritative overview of this increasingly important area. Individual chapters cover the various ecosystems on Earth as well as the different groups of microorganisms with respect to different cycles of matter. In addition, special chapters cover applied aspects, such as land-use and geoengineering. This is an essential book for every microbial ecologist from the PhD student to the experienced scientist and is also recommended for everyone interested in the field of global climate change.