

Preface

Soil erosion has become one of the most prominent environmental problems in the world, which seriously restricts the sustainable development of human economy. Soil erosion is the main way to cause water pollution and the carrier of non-point source pollutant loss. It is reported that in the 1990s, 0% - 50% of the global land area was affected by agricultural non-point source pollution. According to the World Bank report, nearly 50% of China's groundwater has been contaminated by agricultural non-point sources, and the cultivated area affected by agricultural non-point source pollution has reached nearly 200 thousand km². Soil erosion and the loss of nutrients carried by it have led to a sharp decline in land productivity and an increasingly serious eutrophication of water bodies.

This book systematically introduces the current situation and development trend of soil erosion research, and systematically analyzes the factors that cause soil erosion, their action processes, and impact factors. The main contents include soil erosion types and soil erosion forms, hydraulic erosion, wind erosion, gravity erosion, mixed erosion, freeze-thaw erosion and glacier erosion, chemical erosion, soil erosion investigation and evaluation, soil erosion monitoring and prediction, soil erosion prevention and control, etc. It is hoped that through the publication of this book, readers will have a better understanding of soil erosion research and its importance, and it will be helpful for the demonstration and promotion of soil erosion research and prevention and control technology in China.

This book is divided into 9 chapters, all of which are independently prepared by Wang Lei. The book was finally revised and proofread by Lei Wang, Liang Jin, Dan Wei, Zhizhuang An, Jiajun Wu, Linna Suo, Jianli Ding, Yan Li, etc. of the Soil Environment Research Office of the Beijing Academy of Agricultural

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