FOREWORD

Tropical rainforests are increasingly at risk due to the progressing encroachment by humans. Ironically, the exploitation of these natural resources does not bring wealth to many of the small farmers that slash the forests. The fertility of the soil is easily exhausted during cultivation in such humid and warm environments, if no additional nutrients or organic matter are applied. All the more surprising appears to be the discovery of very dark and fertile soils amidst the commonly found yellow-whitish and infertile soils at many locations throughout the Amazon Basin. Already during my first exploration of the soils in the Amazon in the early 1960's, these soils, then called terra preta do índio, piqued my curiosity. Although it was clear that these soils were remnants of ancient populations and did not form naturally, I included them in my dissertation on "Amazon Soils" published in 1966. These first detailed chemical studies showed what potential soil manipulation can have for increasing soil fertility even of highly weathered soils in the tropics. My vision was to use such knowledge and develop techniques to create "terra preta nova",- a new black and fertile soil that would help to sustain landuse on soils that would not support continuous cultivation without massive fertilizer additions.

Only at the end of the 1990s would an increasing number of scientists from diverse scientific backgrounds engage in the study of these fascinating soils. It is satisfying and inspiring to see the next generation of researchers share this fascination and explore the opportunities that *terra preta* presents in many different ways. These soils are not magic and they are not the sole solution to degradation of highly weathered soils in the humid tropics. But they will certainly provide important perspectives to soil management and will trigger new and provoking thoughts that may change landuse in the Amazon and beyond.

I am happy to see this first book publication on *terra preta* which sets the groundwork for future research by summarizing past as well as more recent achievements and introduces these soils to a wider audience. The authors faced the challenge that our knowledge about these soils is still very limited and few publications are readily accessible. This book provides a comprehensive overview of what we know at the moment and includes many hitherto unpublished reports or publications in Portuguese which were not available to an international audience. In this sense, the present publication is a milestone and will become a reference for future research.

Wim Sombroek Wageningen, May 2003 xviii

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