

Contents

Preface		vii
Contributors		viii
CHAPTER 1	Soil fertility research in response to the demand for sustainability <i>M.C. Scholes, M.J. Swift, O.W. Heal, P.A. Sanchez, J.S.I. Ingram and R. Dalal</i>	1
CHAPTER 2	Soil biological processes in tropical ecosystems <i>S. Brown, J.M. Anderson, P.L. Woomer, M.J. Swift and E. Barrios</i>	15
CHAPTER 3	The importance and management of soil organic matter in the tropics <i>P.L. Woomer, A. Martin, A. Albrecht, D.V.S. Resck and H.W. Scharpenseel</i>	47
CHAPTER 4	The synchronisation of nutrient mineralisation and plant nutrient demand <i>R.J.K. Myers, C.A. Palm, E. Cuevas, I.U.N. Gunatilleke and M. Brossard</i>	81
CHAPTER 5	Soil physics and fertility: The effects of water, temperature and texture <i>R.J. Scholes, R. Dalal and S. Singer</i>	117
CHAPTER 6	The relationship between soil macrofauna and tropical soil fertility <i>P. Lavelle, M. Dangerfield, C. Fragoso, V. Eschenbrenner, D. Lopez-Hernandez, B. Pashanasi and L. Brussaard</i>	137
CHAPTER 7	Modelling soil organic matter dynamics and plant productivity in tropical ecosystems <i>W.J. Parton, P.L. Woomer and A. Martin</i>	171
CHAPTER 8	The Jhum agroecosystem in north-eastern India: A case study of the biological management of soils in a shifting agricultural system <i>P.S. Ramakrishnan</i>	189
CHAPTER 9	Biological management of tropical soils: Integrating process research and farm practice <i>M.J. Swift, L. Bohren, S.E. Carter, A.M. Izac and P.L. Woomer</i>	209
Appendices		229
Acronyms		238
Index		239