LIST OF CONTENTS

VOLUME 2

Methodological Considerations on Banana and Plantain Yield Determinations S. Hauser and P. van Asten	433
Plantain (Musa spp.) Cultivation in Africa: a Brief Summary of Developments over the previous Two Decades T. Lescot and J. Gamy	445
Agro-Ecological Intensification in Banana and Plantain (<i>Musa</i> spp.): an Approach to Developing More Sustainable Cropping Systems for Both Smallholder Farmers and Large-Scale Commercial Producers <i>F. Côte, K. Tomekpe, C. Staver, S. Depigny, T. Lescot and R. Markham</i>	457
Factors Driving Fertilizer Adoption in Banana (Musa spp.) Systems in Uganda P.J.A. van Asten, L.W.I. Wairegi, F. Bagamba and C. Drew	465
Benefits and Potential Use of Arbuscular Mycorrhizal Fungi (AMF) in Banana and Plantain (<i>Musa</i> spp.) Systems in Africa J. Jefwa, B. Vanlauwe, D. Coyne, P. van Asten, S. Gaidashova, E. Rurangwa, M. Mwashasha and A. Elsen	479
Growth and Yield Response of the Plantain (<i>Musa</i> spp.) Hybrid 'FHIA 21' to Shading and Rooting by <i>Inga edulis</i> on a Southern Cameroonian Ultisol S. Hauser	487
Plantain (Musa spp.) Cropping Systems of Southern Cameroon S. Hauser and D. Amougou	495
On-Farm Demonstration, Testing and Dissemination of 'Boiling Water Treatment' for Plantain (Musa spp.) Sucker Sanitation in Southern Cameroon A. Hauser, D. Amougou, B. Bengono, F. Ngo Kanga and M. Pekeleke	509
Sustainable Banana (<i>Musa</i> spp.) Production in the Tapi Basin: Khandeshi Farmer's Livelihood <i>N.V. Phirke and V.K. Mahorkar</i>	517
Survival and Yield of the Plantain 'Ebang' (Musa spp., AAB genome, 'False Horn') Produced from Corm Fragment Initiated Plants and Suckers after Hot Water Treatment in Southern Cameroon C. Mekoa and S. Hauser	527
Clonal Propagation of Banana (Musa spp.) cultivar 'BARI-1' (AAA Genome, Sapientum Subgroup) F.M.S. Azam, S. Islam, M. Rahmatullah and A. Zaman	537

Production: Seed Systems

Development of a Diagnostic Protocol for Cucumber Mosaic Virus for Screening Banana (Musa spp.) Planting Material in Ivery Coast N.K. Kouassi, M. Wendy, N. Boonham and J. Smith	547
In Planta Suppressiveness to Nematodes and Long Term Root Health Stability through Biological Enhancement – Do We Need a Cocktail? R.A. Sikora, A. zum Felde, A. Mendoza, R. Menjivar and L. Pocasangre	553
Combating Phytosanitary Constraints to Banana (<i>Musa</i> spp.) Production: the Kenyan Example I. Macharia, A.M. Kagundu, E.W. Kimani and W. Otieno	561
Agrobiotec: Clean Planting Material Micropropagation for Improved Crop Production in Burundi T. Rishirumuhirwa	567
Morphological and Molecular Characterization of <i>Musa</i> Germplasm in Sri Lanka and Selection of Superior Genotypes W.L.G. Samarasinghe, A.L.T. Perera, I.P. Wickramasinghe and S. Rajapakse	571
Fast-Track Release of Black Leaf Streak Resistant Banana and Plantain (Musa spp.) Hybrids and Related Technologies to Farmers in Cameroon: a Strategy to Enhance Food Security E. Njukwe, D. Amah, R. Ndango and A. Tenkouano	577
On-Farm Participatory Evaluation of East African Highland Banana 'Matooke' Hybrids (<i>Musa</i> spp.) R.T. Ssali, K. Nowakunda, R. Barekye Erima, M. Batte and W.K. Tushemereirwe	585
Production: Genetic Improvement	
Overview of Banana and Plantain (Musa spp.) Improvement in Africa: Past and Future J. Lorenzen, A. Tenkouano, R. Bandyopadhyay, B. Vroh, D. Coyne and L. Tripathi	595
In Vitro Mutagenesis in Banana (<i>Musa</i> spp.) Improvement S.M. Jain	605
Somatic Mutations and Their Implications to the Conservation Strategies of the East African Highland Bananas (Musa spp.) D. Karamura, E. Karamura, W. Tushemereirwe, P.R. Rubaihayo and R. Markham	615
Analysis of Genetic Diversity and Relationships in East African 'Apple Banana' (AAB Genome) and 'Muraru' (AA Gemone) Dessert Bananas Using Microsatellite Markers M. Onyango, D. Haymer, S. Keeley and R. Manshardt	623

Agrobacterium-Mediated Transformation of Banana Cultivar 'Rastali' (Musa, AAB Genome) with Chitinase Gene S. Sreeramanan, M. Maziah, S. Sariah and R. Xavier	637
Control of Banana Xanthomonas Wilt Disease Using Genetic Engineering L. Tripathi, J.N. Tripathi and W.K. Tushemereirwe	649
Production	
Establishment of Virus-Free Banana (<i>Musa</i> spp.) Mother Stock for Production of Certified Banana Plants and <i>Banana Streak Virus</i> Tested Tissue Culture Seedlings <i>L. Karanja, L. Wasilwa, E. Nyahoga and A. Gichangi</i>	661
Innovation Systems: Plenary	
Bananas (<i>Musa</i> spp.) and New Thinking about Pathways for Science Impact N. Röling	669
Innovation Systems, Food Security and Economic Development: Lessons from the ACP Region <i>J.A. Francis</i>	681
Tracking the Spillover of Introduced Technologies: the Case of Improved Banana (<i>Musa</i> spp.) Germplasm in Northeast Tanzania <i>J.G. Mowo, L.A. German, M.N. Kingamkono and K.F. Masuki</i>	695
Rapid Responses to New Plant Diseases: the Use of Going Public to Monitor the Spread of <i>Xanthomonas</i> Wilt and Control Napier Grass Stunt in East Africa <i>E. Boa</i>	705
Innovation Systems: Tracking Adoption	
Community-Based Organizations and Their Effect on the Adoption of Agricultural Technologies in Uganda: a Study of Banana (<i>Musa</i> spp.) Pest Management Technology <i>E. Katungi and K. Akankwasa</i>	719
Macropropagation as an Innovative Technology: Lessons and Observations from Projects in Cameroon L.M. Lefranc, T. Lescot, C. Staver, M. Kwa, I. Michel, I. Nkapnang and L. Temple	727
Evaluation of the Dissemination of New Banana (<i>Musa</i> spp.) Technologies in Central Ghana - the Role of Technology Characteristics <i>B.M. Dzomeku, C. Staver, G.K.S. Aflakpui, D. Sanogo, H. Garming, A.A. Ankomah and S.K. Darkey</i>	735
Factors Affecting the Adoption of Disease-Resistant Plantain and Banana Hybrids in Nigeria C. Aïtchédji, A. Tenkouano and O. Coulibaly	741

Assessing the Impacts of Banana Bacterial Wilt Disease on Banana (Musa spp.) Productivity and Livelihoods of Ugandan Farm Households E. Karamura, G. Kayobyo, W. Tushemereirwe, S. Benin, G. Blomme, S. Eden Green and R. Markham	749
Innovation Systems: Turning Farmers into Business People	
Increasing Small-Scale Farmers' Competitiveness in Banana (Musa spp.) Production and Marketing K. Nowakunda, D. Ngambeki and W. Tushemereirwe	759
Introduction to Tissue Culture Banana Technologies and Their Impact on Producer Wellbeing J.J. Anyango, F.M. Wambugu, J. Nkanya, G. Kyalo and C. Onyango	767
Developing Viable Business with Smallholders through Local Service Providers the Case of Banana (<i>Musa</i> spp.) Value Chain Development in Zimbabwe <i>E. Mudyazvivi and S. Maunze</i>	773
Innovation Systems: Innovating Delivery Systems	
A Regional Network of Dialogue and Exchange Platforms to Improve the Identification of Farmer's Needs and the Dissemination of New Cultivars of Banana and Plantain (Musa spp.) I. Nkapnang Djossi, K. Tomekpe, F. Van Schoubroeck, A. Bikoï, B. Ndemba, M. Lama, C. Ngnigone, B. Lokossou, H. Hocde and J. Lançon	783
A Proposal for the Use of Partnership-Extension Model to Facilitate Adoption of the International Institute of Tropical Agricultue's Plantain and Banana (<i>Musa</i> spp.) Technologies in Nigeria I. Ogunlade and O. Coulibaly	791
Using Strategic Entry Points and Linked Technologies for Enhanced Uptake of Improved Banana (<i>Musa</i> spp.) Germplasm in the Humid Highlands of East Africa K.F.G. Masuki, J.G. Mowo, T.E. Mbaga, J.K. Tamui, J.M. Wickama and C.J. Lyamchai	797
Training Requirements of Extension Workers in Banana and Plantain (<i>Musa</i> spp.) Technology Transfer in Southwestern Nigeria L.O. Olajide-Taiwo, F.B. Olajide-Taiwo, O.A. Akinsorotan and O.A. Adekunle	805
A Market Analysis of the Somalia Banana Sector and Its Potential for Export Revival: Experiences of Support to Agricultural Marketing Services and Access to Markets (SAMSAM) Project <i>E. Baars and A. Riediger</i>	811
Innovation Systems: Profiling Country Perspectives	
An Innovation Capacity Analysis to Identify Strategies for Improving Plantain and Banana (<i>Musa</i> spp.) Productivity and Value Addition in Democratic Republic of Congo R. Mobambo, C. Staver, S. Hauser, B. Dheda and G. Vangu	821

Meeting the Challenge of the Plantain (Musa spp.) Subsector Economic Restructuring in Cameroon J.T. Tetang, M. Kwa, L. Temple, A. Bikoï, E. Njukwe, C. Staver and J.F. Ottou	829
Research-Extension-Farmers Linkage System on Banana and Plantain (Musa spp.) in Nigeria: the Diffusion of Innovations O.I. Oladele	837
An Analysis of the Agricultural Science, Technology and Innovation System for Plantain (<i>Musa</i> spp.) in Ghana <i>I.S. Egyir, E. Owusu-Bennoah, F.O. Anno-Nyako and B. Banful</i>	843
Analysis of the Agriculture Science, Technology and Innovation System: Banana (Musa spp.) Case Study in Tanzania A.P. Maerere, C.L. Rweyemamu, K.P. Sihuga, E.R. Mgembe, E.G. Rwambali and S. Nchimbi-Msolla	851
Research Focus on Banana and Plantain (<i>Musa</i> spp.): Nigerian Perspectives <i>M.A. Adejoro, A.O. Odubanjo and B.O. Fagbola</i>	859