Table of Contents

Acknowledgements	ı
Table of Contents	iii
Introduction	1
Biodiversity conservation: from ecosystems to genes	2
History of the African rainforest	5
Verifying the timber supply chain: genetic tools for species identification and origin tracking	9
Thesis goals and outline	13
Species studied	15
Sampling strategy	18
Large-scale patterns of genetic differentiation within the Central African tree Scorodophloeus zenkeri	19
INTRODUCTION	20
MATERIALS AND METHODS	21
RESULTS	23
DISCUSSION	28
SUPPLEMENTARY MATERIAL	30
Isolation of microsatellite loci in the African tree species <i>Staudtia kamerunensis</i> (Myristicaceae) using h throughput sequencing	igh- 35
INTRODUCTION	36
MATERIALS AND METHODS	37
RESULTS AND DISCUSSION	38
Hidden diversity in Congo Basin tree populations: a case study in Staudtia kamerunensis	43
INTRODUCTION	44
MATERIALS AND METHODS	46
RESULTS	49
DISCUSSION	56
CONCLUSIONS	59
SUPPLEMENTARY MATERIAL	60
Genetic markers for species conservation and timber tracking: development of microsatellite primers fo tropical African tree species <i>Prioria balsamifera</i> and <i>Prioria oxyphylla</i>	or the 67
INTRODUCTION	68
MATERIALS AND METHODS	69
RESULTS AND DISCUSSION	71
CONCLUSIONS	81
	51

Phylogeography and population genetics of <i>Prioria balsamifera</i> , an endangered timber species from Central		
Africa	83	
INTRODUCTION	84	
MATERIALS AND METHODS	86	
RESULTS	88	
DISCUSSION	93	
CONCLUSIONS	95	
SUPPLEMENTARY MATERIAL	96	
General discussion	101	
Comparative phylogeography of tropical African tree species	102	
Implications for conservation efforts	107	
Origin determination of African timber trees	107	
Prospects	108	
Summary	111	
Résumé	113	
Funding	115	
References	117	