Table of Contents

Preface	İ
Acknowledgements	iii
Table of Contents	iv
List of Abbreviations	vi
General Introduction	1
Research objectives and outline of the thesis	12
Chapter 1 Farmer perceptions, knowledge, and practices in sweetpotato production under changing climatic conditions in Uganda	
Subchapter 1.1 Farmers' perception of and coping strategies to climate change: evidence from six agro-ecological zones of Uganda	16
Subchapter 1.2 Indigenous knowledge of seasonal weather forecasting: A case study in six regions of Uganda	27
Subchapter 1.3 Insect pests of sweetpotato in Uganda: farmers' perceptions of their importance and control practices	37
Subchapter 1.4	
Gender differences in access and use of selected productive	
resources among sweetpotato farmers in Uganda	51
Chapter 2 Incidence and severity of insect pests and abundance of nature enemies in sweetpotato farmers 'fields in Uganda	'al
Subchapter 2.1	
Incidence, abundance, and damage by the sweetpotato butterfly	
(Acraea acerata Hew.) and the African sweetpotato weevils	
(Cylas spp.) across an altitude gradient in Kabale district, Uganda	67
Subchapter 2.2	
Pest status of Acraea acerata Hew. and Cylas spp. in sweetpotato	
(Ipomoea batatas (I.) Lam.) and incidence of natural enemies in	
The lake Albert crescent agro-ecological zone of Uganda	76



Phenology modeling and regional risk assessments for the Africant sweetpotato weevil <i>Cylas puncticollis</i> Boheman (Coleoptera: Brentidae)	ican
Subchapter 3.1	
A temperature-based phenology model for predicting the	
development, fecundity, and life-table parameters of Cylas	
puncticollis (Coleoptera: Brentidae)	85
Subchapter 3.2	
Forecasting of C. puncticollis distribution in Africa using a	
temperature-driven phenology model linked with geographic	
information systems	106
Chapter 4 Phenology modeling and regional risk assessments for the sweetpotato butterfly <i>Acraea acerata</i> Hew.	
Subchapter 4.1	
A temperature-based phenology model for predicting life-table	
parameters of the sweetpotato butterfly Acraea acerata Hew.	
(Lepidoptera: Nymphalidae)	116
Subchapter 4.2	
Forecasting of the future Acraea acerata Hew. distribution in	
Africa using a temperature-driven phenology model linked with	
geographic information systems	136
Chapter 5	
General discussion	145
Summary	156
Zusammenfassung References	159
	162

Chapter 3