

Imam Widhiono (Autor)

Impact of forest modification on butterfly diversity along an elevational gradient at Slamet Mountain, Central Java, Indonesia

Slamet Mountain, Central Java, Indonesia	
	_

https://cuvillier.de/de/shop/publications/3234

Copyright:

Cuvillier Verlag, Inhaberin Annette Jentzsch-Cuvillier, Nonnenstieg 8, 37075 Göttingen, Germany

Telefon: +49 (0)551 54724-0, E-Mail: info@cuvillier.de, Website: https://cuvillier.de

CONTENTS

ACKNOWLEDGEMENTS

1. INTRODUCTION	1
2. BACKGROUND AND OBJECTIVES	4
3. STUDY AREA	9
3.1. Climate, vegetation and soil	10
3.2. Forest management and nature conservation	10
3.3. Study plot	11
4. METHODS	15
4.1. Butterfly collection	15
4.2. Butterfly identification	15
4.3. Calculation of community parameters	15
4.4. Vegetation analysis	20
5. RESULTS	22
5.1. Climatic conditions	23
5.2. Vegetation structure	23
5.3. Butterfly community at Slamet Mountain	26
5.3.1. Abundance	29
5.3.1.1. Differences between seasons	30
5.3.1.2. Differences between elevations	32
5.3.1.3. Differences between habitats	44
5.3.1.4. Habitat preference	50
5.3.1.5. Endemics species	53
5.3.2. Species richness and diversity	58
5.3.2.1. Differences between elevations	58
5.3.2.2. Differences between habitats	67
6. DISCUSSION	70
6.1. Composition of Mountain Slamet's butterfly fauna	70
6.2. Patterns of Butterfly abundance	72
6.2.1 Finding at different habitat	73

	6.2.2. Finding at different elevations	77	
	6.2.3. Finding at different seasons	79	
6.3. P	atterns of butterfly diversity	80	
	6.3.1. Finding at different habitat	80	
	6.3.2. Finding at different elevations	83	
6.4. In	mpact of forest management	85	
	6.4.1. Microclimate, vegetation structure and butterfly community	85	
	6.4.2. Habitat preference	87	
	6.4.3. Endemic species	89	
	6.4.4. Species richness and diversity	90	
6.5. I	mplication for forest managemnet and conservation	90	
7. SUMMAI	RY	93	
8. REFERE	NCES	96	
APPENDIC	ES		
	Total number of butterfly individuals captured in the plantation forest during dry and wet season 2000 and 2001 Total number of butterfly individuals captured in the secondary forest during dry and wet season 2000 and 2001		
••	Total number of butterfly individuals captured in the tourist area during and wet season 2000 and 2001 Total number of butterfly individuals captured in the agroforestry area during dry and wet season 2000 and 2001		
Appendix 5	Total number of butterfly individuals captured in the plantation forest along an elevational gradient (from 800 m to 1,700 m)		
	endix 6 Total number of butterfly individuals captured in the secondary forest along an elevational gradient (from 800 m to 1,700 m)		
• •	Total number of butterfly individuals captured in the tourist area along elevational gradient (from 800 m to 1,700 m) Total number of butterfly individuals captured in the agroforestry area		
	an elevational gradient (from 800 m to 1,700 m) Diversity parameters calculated for the butterfly community studied a		
Appendix 10	Slamet Mountain in the year 2000 using EstimateS.5 (Colwell,1997) Diversity parameters calculated for the butterfly community studied Slamet Mountain in the year 2001 using EstimateS.5 (Colwell,1997)		
Appendix 1	1 Photographic section	,	