



Sylvestre A. BADOU<sup>1\*</sup>, Roel Houdanon, André DE KESEL & Nourou S. YOROU Research Unit « Tropical Mycology and Plant-Fungi Interactions », Laboratory of Ecology, Botany and Plant Biology, University of Parakou, 03 BP 125, Parakou, BENIN\* Corresponding author : <a href="mailto:sbadou@ymail.com">sbadou@ymail.com</a>



**Consequence of agriculture on Ectomycorrhizal** trees



Cutting wood (ectomycorrhizal trees) for the production of charcoal



Harvesting of firewood in forests

# Impact of Anthropogenic Activities on Natural Habitats of higher fungi in the Wari-Maro Forest Reserve in Northern Benin

This project is about safeguarding an ecosystem service that largely benefits local people. It is about protecting local income by protecting the environment. In Benin fungi are important in the daily lives of local people. In spite of this, their natural habitats are subject to very strong anthropogenic pressures. The aim of this study is to draw local populations to the causes and consequences of the degradation of natural habitats of higher fungi.













Forests are reservoirs containing various natural resources useful to local populations. Among these natural resources are fungi, some of which serve as food and medicine for the local population during the lean season. It is therefore important to sustainably conserve our forests. We thank the Rufford Foundation for funding this project.





# Dynamic vegetation cover of the Wari-Maro Forest Reserve from 1998 to 2018 and projection for the year 2042

Sylvestre A. BADOU<sup>1\*</sup>, Roel Houdanon, André DE KESEL, Nourou S. YOROU Research Unit « Tropical Mycology and Plant-Fungi Interactions », Laboratory of Ecology, Botany and Plant Biology, University of Parakou, 03 BP 125, Parakou, BENIN\* Corresponding author : sbadou@ymail,com



### Fig.1: Land Cover Units of the Wari-Maro Forest **Reserve in 1998**



## Fig.3: Land Cover Units of the Wari-Maro Forest **Reserve in 2018**

Natural habitats are under pressure from local populations. But these natural resources some of which serve as food and medicine to local people during the lean periods. It is therefore important to reduce or reduce the degradation of natural habitats of higher fungi.

We thank the Rufford Foundation for funding this project.

This project concerns the safeguarding of an ecosystem service that largely benefits local income by protecting the environment. In Benin, natural habitats provide goods and services to local populations. In spite of this, they are subjected to very strong anthropic pressures which results in their reductions in surface area and biodiversity. The purpose of this study is to attract local populations to the dynamics of natural habitats of higher fungi.

**Reserve in 2008** 

## Fig.4: Projection map of the vegetation cover of the forest reserve for the year 2042

Table.1: Rate of evolution of vegetation cover from 1998 to 2018								
	1998		2008		2018			
nits of occupation	Area (ha)	Proportion (%)	Area (ha)	Proportion (%)	Area (ha)	Proportion (%)		
gglomeration	8.94	0.01	10.55	0.01	13.86	0.01		
eld mosaic and fallow	363.52	0.32	1157.65	1.04	2149.64	1.93		
avannah with trees and arubs	17310.09	15.58	54499.19	49.06	84089.79	75.69		
oodland and wooded								
ıvannah	77194.48	69.48	47644.85	42.89	20489.03	18.44		
ense forest	5186.91	4.67	1982.34	1.78	1056.49	0.95		
alery forest	10331.60	9,30	4759.11	4.28	2184.82	1.97		
ody of water	497.24	0,45	582.50	0.52	265.11	0.24		
ock outcrop	202.61	0,18	459.19	0.41	846.63	0.76		
otal	111095.38	100,00	111095.38	100.00	111095.38	1003.00		

### Table.2: Projection statistics for the year 2042

Jnits of occupation	2042			
	Superficie (ha)	Proportion (	%)	
Agglomeration		15.33	0.01	
ield mosaic and fallow		214.15	1.09	
Savannah with trees and shrubs	108	220.55	97.41	
Noodland and wooded savannah		344.75	0.31	
Dense forest		337.21	0.30	
Galery forest		87.83	0.08	
Body of water		119.04	0.11	
Rock outcrop		756.53	0.68	
<b>lotal</b>	111	095.38	100.00	

