



University of Abomey-Calavi (Benin)
Faculty of Agronomic Sciences
LABORATORY OF APPLIED ECOLOGY



**2007 SCIENTIFIC ACTIVITIES REPORT OF LABORATORY
OF APPLIED ECOLOGY**

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2

CONTENTS

Foreword	4
1. Methods of data collection	6
2. Types of research and publications at LEA.....	7
2.1 Types of research at LEA	7
2.2 Types of publications at LEA in 2007	7
2.2.1 Thesis at LEA	7
2.2.1.1 Ongoing PhD thesis	8
2.2.1.2 MSc thesis	8
2.2.1.3 Agronomist degree thesis.....	9
2.2.2 Scientific productions at LEA in 2007	10
2.2.2.1 Publications in peer review journals	10
(i) Number and categories of publications	10
(ii) Impact Factor Indexes of Publications.....	10
(iii) Specialization Indexes of publications	11
(iv) Weighted Impact Factor Index of publications.....	13
(v) Indexes of co-publications in peer review journals.....	13
2.2.2.2 Proceedings: number of publications and indexes of specialization.....	14
2.2.2.3 Trends of publications in peer review journals and proceedings from 1998 to 2007	15
2.2.2.5 Abstracts: number of publications and indexes of specialization.....	16
2.2.2.6 Technical Reports and newsletter in 2007	17

3. Conferences & workshops in 2007	17
3.1 Conferences organised by LEA	17
3.2 Participation at the conference	17
4. Research projects and research grants at LEA in 2007	17
5. Human resources and visiting research in LEA in 2007	18
6. General discussion & conclusion	20
7. References	22
8. Annexes.....	23
Annex 1: Ongoing PhD thesis (since or before 2007).....	23
Annex 2: Completed MSc thesis in 2007.....	25
Annex 3: Completed agronomist engineer degree thesis in 2007	26
Annex 4: Completed MBA thesis in 2007	27
Annex 5: Completed PhD thesis in 2007.....	27
Annex 6: Articles published in peer-review journal with IF.....	28
Annex 7: Articles published in peer-review journal without IF	28
Annex 8: Articles in press in peer-review journal with IF	29
Annex 9: Articles in press in peer-review journal without IF	31
Annex 10: Articles under review in peer-review journal with IF	31
Annex 11: Articles under review in peer-review journal without IF	33
Annex 12: Publications in proceedings	34
Annex 13: Abstracts in books of abstracts.....	39
Annex 14: Technical Reports in 2007	42
Annex 15: Newsletter in 2007	42
Annex 16: Research projects in LEA in 2007.....	43
Annex 17: Research Grants in 2007	45

Annex 18: Prizes and nomination in 2007	46
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Annex 19: Visitors in 2007.....	46
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Foreword

Interest in research activities in Laboratory of Applied Ecology (LEA) began since 1994 where it has been created by Professor Brice A. SINSIN. To date, LEA is one of the advanced research institutions at the University of Abomey-Calavi in Benin. The laboratory is the leading institution of research on plant and animal genetic resources in Benin.

The major research fields in which LEA is currently involved are: (i) Conservation and management of forest (plants and animals) genetic resources, (ii) Ethnobotany and new crops development; (iii) Management of traditional agroforestry systems; (iv) Ecological restoration of degraded areas; (v) Ecophysiology of fodder plants; (vi) Management of Non Timber Forests Products; (vii) Management of protected areas (national parks, hunting zones, community areas); (viii) Bio Monitoring of wildlife; (ix) Red list of threatened plants and wildlife in Benin.

Scientific researches at the LEA up to now have yielded in more than 150 scientific publications in peer-reviewed international journals, books and proceedings of scientific conferences.

LEA has executed and been involved in several projects on sustainable management of natural resources or/and tree domestication in Africa. It collaborates with many international institutes involved in nature conservation and biodiversity management such as World union for Nature Conservation (IUCN), Bioersity International (ex-IPGRI), World Agroforestry Centre (ICRAF), etc. The laboratory is also in close collaboration with many networks, NGOs and International Scientific Groups (WCPA, CWRSG, BIOTA, etc.) and Universities (Belgium, Canada, Denmark, France, Germany, Japan, Switzerland, USA, Burkina-Faso, Cameroon, Ghana, Mali, , Nigeria, Niger, Senegal, etc.) involved in the field of nature conservation in the world.

Furthermore, LEA is involved in several research projects (DADOBAT-UE, SUN-UE, BIOTA, VIIR's Own Initiative Program) on sustainable management of natural resources or/and tree domestication in Africa. As such, the laboratory developed numerous research activities with regard to threatened forest species such as *Milicia excelsa*, *Adansonia digitata*, *Tamarindus indica*, *Pentadesma butyracea*, *Khaya senegalensis*, and *Azzeria africana*.

The present report has pointed out research activities at the Laboratory of Applied Ecology (LEA) in 2007. It is intended for several audiences as researchers in Benin and abroad, developers, donators and other professionals interested by the fields of applied ecology. The report is organized into eight major sections:

Section 1 relies on the methodology used to gather information included in the report and shows how various indexes have been calculated. Section 2 focuses on the types of research (individual, national teams, regional teams and international teams), types of publications (thesis, peer review articles, proceedings, technical reports, and newsletter), trends of publications for the last ten years (1998 – 2007) and the analysis of language of publications according to the types of publications in the laboratory. Section 3 provides a summary of conferences organised by LEA in 2007 and those for which researchers from the laboratory have been taken part. Section 4 describes the research projects and research grants obtained in the laboratory in 2007 whereas section 5 shows details about active human resources in LEA as well as visitors who were in the laboratory in the framework of bilateral collaboration. Section 6 discusses the research activities performed in the laboratory in 2007 while section 7 shows the used references. Finally, are presented in the section 8, annexes showing full details on references of the different types of publications, research projects and grants as well as on conferences and visiting research in the laboratory.

1. Methods of data collection

The present report on the scientific activities of LEA in 2007 has been computed based on the research activities performed by researchers and students from the laboratory.

Firstly, information related to the thesis (PhD, MSc, Agronomist degree), scientific articles (published, in press or under review) in peer-review journals and those published through proceedings, books of abstracts, technical reports and newsletter has been described. For each category of publication, we have pointed out the indexes of specialization according to different disciplines. Also, for the articles published in peer-review journals, we have distinguished the number of journals with Impact Factor from the ones without Impact Factor (Web of Science of Thomson). Are considered, only the publications for which address of authors and/or co-authors are the one of LEA/FSA. Furthermore, collaborations and co-publications with scientists from developed and African countries have been detailed throughout the report.

The types of research have been expressed respectively by the ratio between the number of publications done individually or in national, regional or international teams and the total number of publications in the laboratory.

Moreover, the trends of publications for the last 10 years (1998 – 2007) have been assessed both for proceedings and published articles in peer review journals (with impact factor or not). Also the ratio French/English is computed for various types of publications including the ones in press.

For data processing, the following indexes have been calculated:

- *Specialization Index of publications* which is the ration between the number of publications in a given discipline and the total number of publications when considering all disciplines;
- *Impact Factor Index of Publications* which is the ratio between the number of publications having an impact factor and the total number of publications published in peer review journals;
- *Weighted Impact Factor Index of publications* which is the product of all publications with impact factor and the arithmetic sum of impact factor indexes as described in the web of science of Thomson;

- *Index of co-publication at country vs. continental level* which is the ratio between the number of co-publications at country vs international level and the total number of co-publications in the laboratory.

Finally, information related to the conferences (organized by the laboratory and the ones to which the researchers of the laboratory have participated), research projects and grants have been presented in the report.

2. Types of research and publications at LEA

2.1 Types of research at LEA

As shown by the figure 1, most of the articles published by researchers of LEA have been done together with international teams (52 %) and national ones (44 %). Apart from the thesis individually realized by students, very few number of research activities (4 %) were performed individually by the researcher. Worst, no articles were published within a regional team.

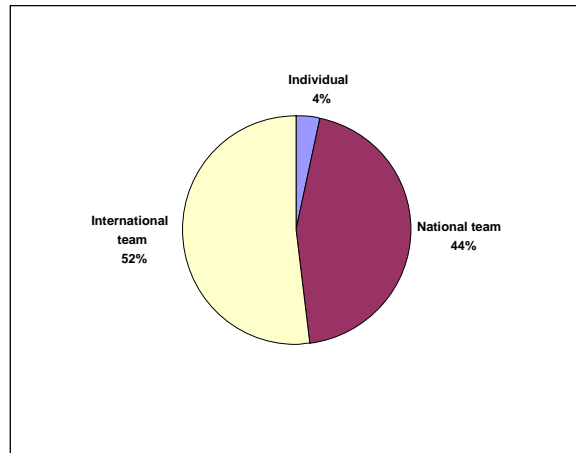


Figure 1. Spatial context of research activities in LEA in 2007

2.2 Types of publications at LEA in 2007

2.2.1 Thesis at LEA

In 2007, 9 MSc theses (DEA), 11 agronomists' thesis, 2 MBa (DESS) and 2 PhD theses (Doctorate) have been defended by researchers from LEA. Moreover, 26 students from LEA

are still doing their PhD research activities which will be defended in following years. Details about the research topics and candidates are shown in annexes 1, 2, 3, 4 and 5.

2.2.1.1 Ongoing PhD thesis

Various research fields were covered by the ongoing theses in the LEA ranging from forest and plant ecology (31%), to wildlife and protected areas management (23%), landscape management (15%), agroforestry (9 %), ethnobotany (8%) and grassland sciences (8%) (Fig. 2).

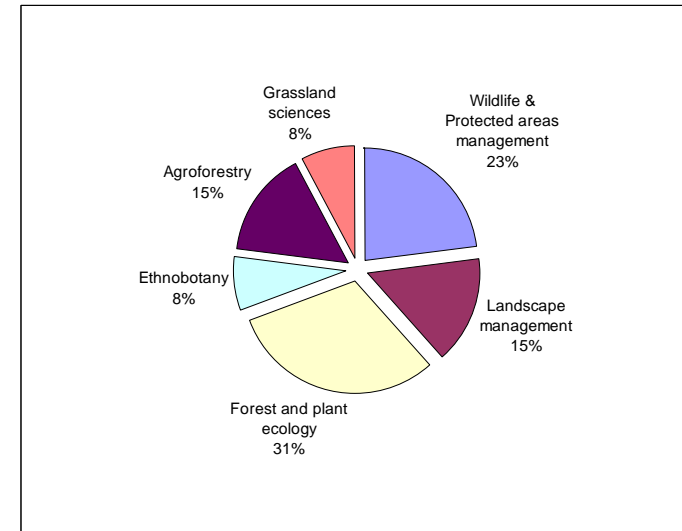


Figure 2. Spectrum of ongoing PhD thesis and Research Fields in 2007

2.2.1.2 MSc thesis

Nine (9) MSc theses were defended in LEA in 2007 and have targeted various fields of research such agroforestry (34 %), forest ecology and management (33 %), wildlife management (22 %) and soil restoration (11 %) (Fig. 3).

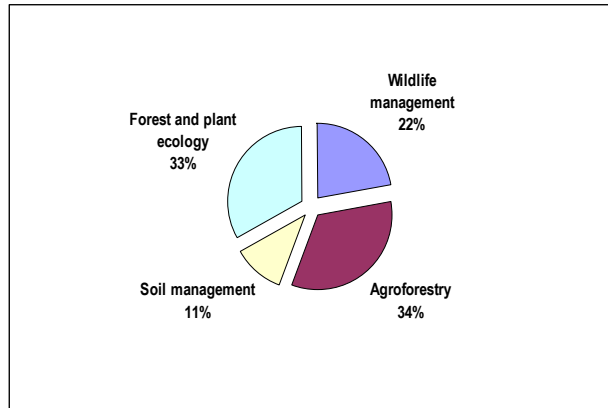


Figure 3. Spectrum of MSc thesis and Research Fields in 2007

2.2.1.3 Agronomist degree thesis

Eleven (11) Agronomist degree thesis from LEA have been defended in 2007 respectively in the fields of management of protected areas (46 %), agroforestry (27 %), plant and forest ecology (18 %), ethnobiology (9 %) (Fig. 4).

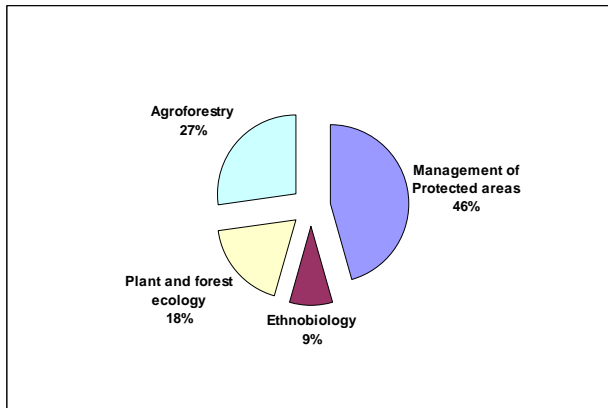


Figure 4. Spectrum of Agronomist degree thesis according to the fields of research in 2007

2.2.2 Scientific productions at LEA in 2007

In 2007, scientific research at LEA have yielded in 40 scientific publications in peer-reviewed journals (published: 9; in press: 9; under review: 22), 21 articles in proceedings, 16 abstracts in the books of abstract, 4 technical reports and 1 newspaper.

2.2.2.1 Publications in peer review journals

(i) Number and categories of publications

In 2007, 40 scientific publications have been published by researchers of LEA (Fig. 5). 22,5 % were published in peer review journals whereas 22,5 % and 55 % are still in press or under review, respectively. Full references (authors, journals, etc.) of those publications are shown in annexes 6, 7, 8, 9, 10 and 11.

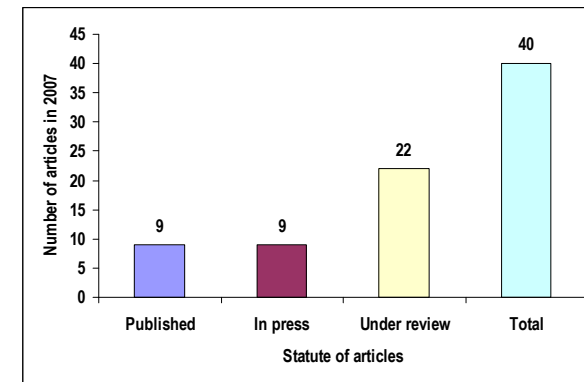


Figure 5. Spectrum of scientific productions of LEA in 2007

(ii) Impact Factor Indexes of Publications

Figure 6 highlights a lower percentage (%) of the published articles in the journals having Impact Factor in 2007 compared to ones which don't have an Impact Factor. However, the reverse tendency is observed for the articles in press or under review. Therefore, we can conclude that more and more researchers from LEA try to publish in the peer review journals having an IF.

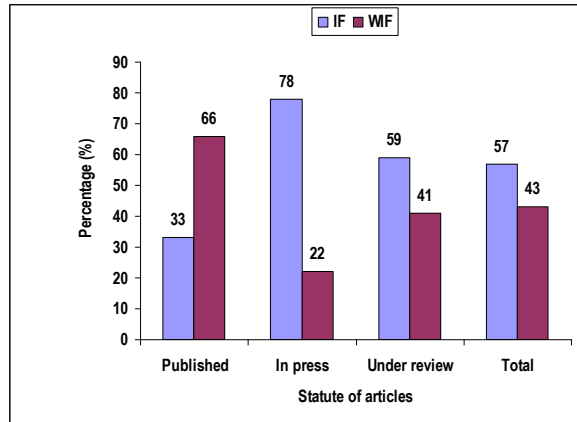


Figure 6. Status and Indexes (%) of scientific publications of LEA in 2007

Legend: IF = Impact Factor; WIF = Without Impact Factor

(iii) Specialization Indexes of publications

a) Published articles

As shown on the figure 7, the 9 published articles cover various fields such as ethnobotany (33%), taxonomy (33%), molecular biology (11%), plant breeding (11%), biometry (11%) and grass and forage science (11%).

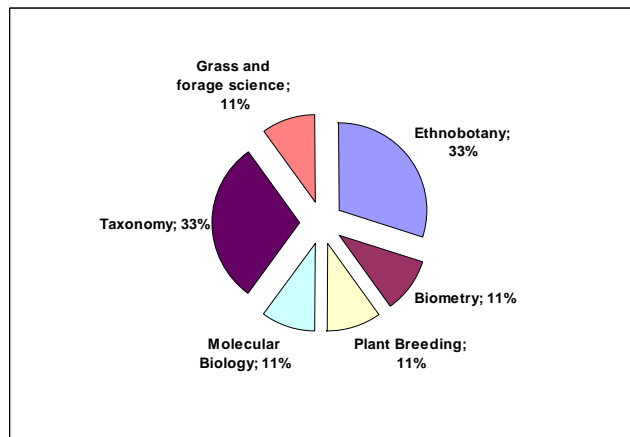


Figure 7. Published articles according to the fields of research in 2007

b) Articles in press

Articles *in press* cover various fields such as molecular biology (34%), ethnobotany (22%), biometry (22%), agroforestry (11%) and grass and forage science (11%) (Figure 8)

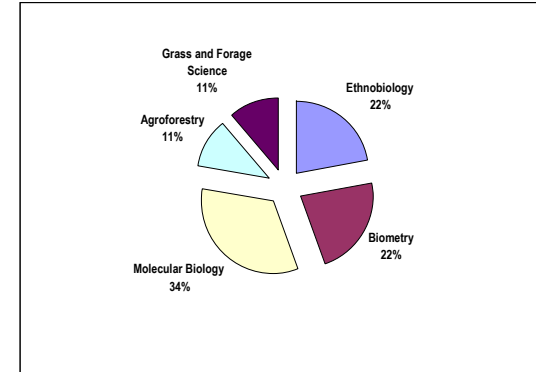


Figure 8. Articles in press according to the fields of research in 2007

c) Articles under review

Submitted articles which are still under review also cover various fields of disciplines such as plants and forest ecology (45%), wildlife management (18%), biometry (14%), ethnobotany (14%) and grass and forage science (9%) (Fig. 9).

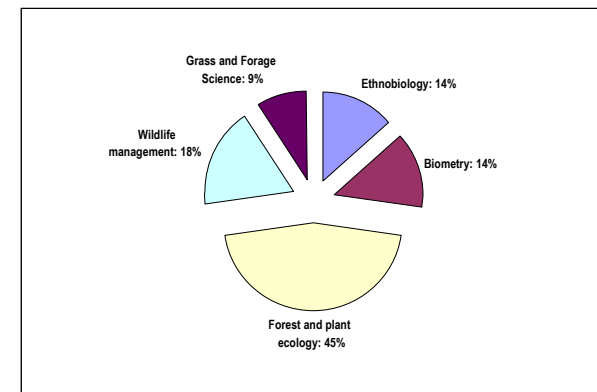


Figure 9. Articles under review according to the fields of research in 2007

(iv) *Weighted Impact Factor Index of publications*

The Weighted Impact Factor Indexes of publications according to every discipline of specialization in LEA is shown in the table 1.

Table 1. Weighted Impact Factor Indexes of publications according to the disciplines of specialization

Disciplines	Weighted Impact Factor Indexes	
	Published articles	Articles <i>in press</i>
Taxonomy	0.476	-
Ethnobiology	0.349	0.221
Molecular Biology	0.159	2.484
Grass and Forage Science	-	0.042
Biometry	-	0.019

(-) = no publication under the category

Table 1 indicates that the most important publications which have highly contributed to the impact factor of the laboratory in 2007 were related to molecular biology. Therefore, the latter discipline is the one in which the recorded scientific publications in LEA had the highest impact factor,.

(v) *Indexes of co-publications in peer review journals*

a. *Country level*

The LEA belongs to a broad scientific collaborative network. Thus, its researchers used to publish their research outputs in collaboration with scientists abroad and locally. At a country level, the 2007 highest number of publications was written with researchers from Benin (34 %), Belgium (30 %) and Germany (23 %) while the remaining were published together with scientists from The Netherlands (5%), USA (4 %), France (2 %) and Australia (1 %).

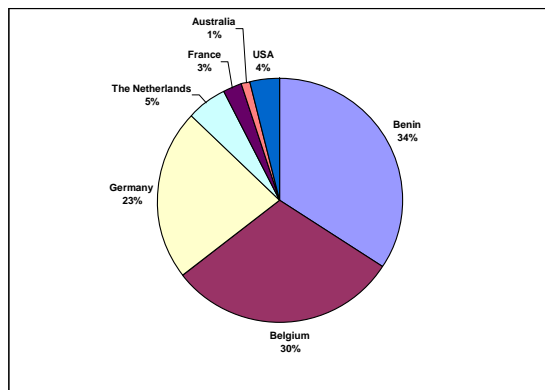


Figure 10. Diversity in indexes of the LEA co-publications in peer review journals at Countries scale in 2007

b. *Continental level*

At continental level, the most important publications have been co-published with scientists from Europe (53 %) following by those from Africa (42 %), USA (4 %) and Australia (1 %) (Fig. 11).

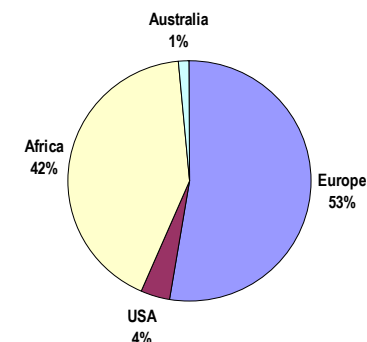


Figure 11. Diversity in indexes of co-publications in peer review journals at Continental scale in 2007

2.2.2.2 *Proceedings: number of publications and indexes of specialization*

Twenty one (21) articles were published in the proceedings of scientific conferences in 2007. Most of these publications occurred in the field of forest ecology (29 %) and wildlife management (28 %) while the remaining are related to soil management (14 %), plant physiology (14 %), agroforestry (5 %), socio-economy (5 %) and ethnobotany (5 %) as shown in Fig. 12. Full references of these publications are shown in annex 12.

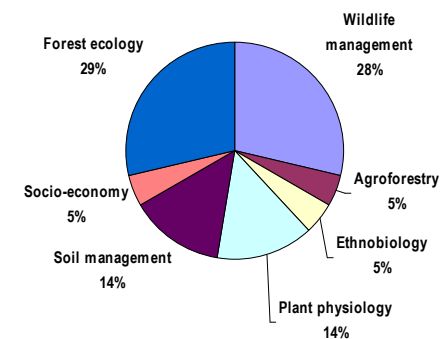


Figure 12. Number of publications and indexes (%) of specialization in Proceedings 2007

2.2.2.3 Trends of publications in peer review journals and proceedings from 1998 to 2007

During the last 10 years, trends related to the scientific publications in LEA varied according to the type of publications (proceedings and peer review journals). Except for 2007 where 21 publications were published as proceedings, the number was generally lower and varied between 0 and 7 publications per year. Moreover, the publications in peer review journals have globally increased from 1998 to 2007 with a peak in 2006 (16 publications) (Fig. 13). For a given year, the publications in peer review journals having an impact factor were generally lower compared to the ones in peer review journals without impact factor (Fig. 13). Specifically, publishing in peer review journals having an impact factor has started in the laboratory in 2000 with 1 to 3 publications per year, the peak being observed in 2006 with 6 papers. This corresponds to the period when researchers from LEA started actively collaborating with universities and research institutes in the north.

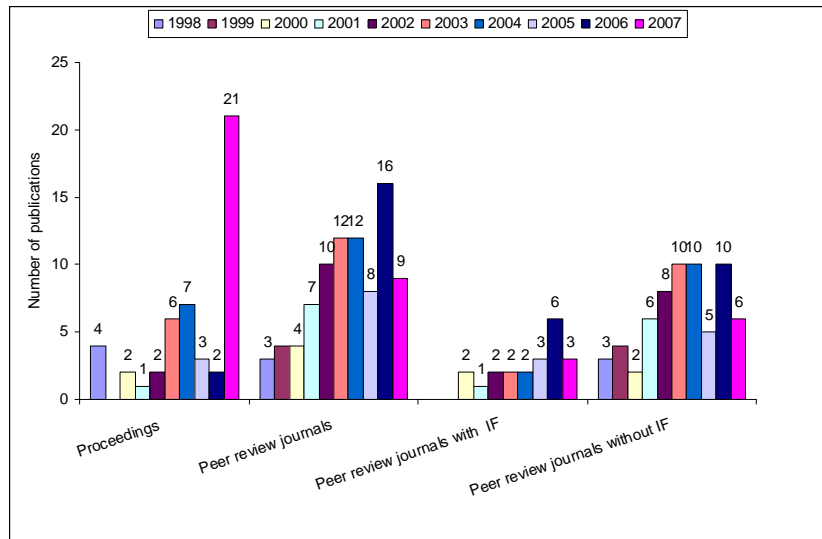


Figure 13. Trends per types of publications from 1998 to 2007

2.2.2.4 Ratio French/English according to the types of publications

About 95% of publications in peer review journals were in English against only 5% published in French (Fig. 14). In the contrary, the majority of local thesis (77%) and publications in proceedings (57 %) of conference held in French speaking Africa were in French (Fig. 14)..

The increase in number of publication in English in peer review journals with impact factor correspond with the period when LEA started co-operating with research institutions in the north where English is used as working language.

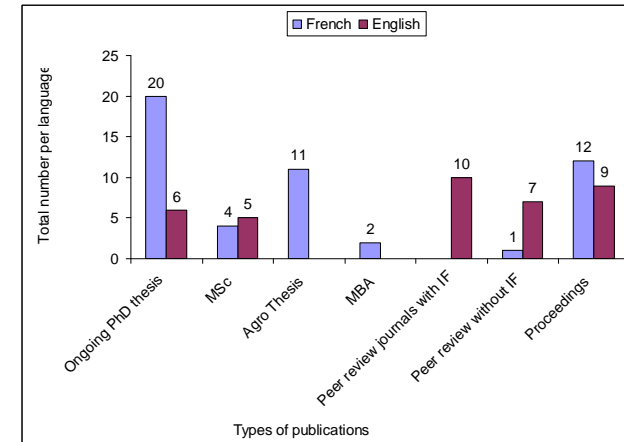


Figure 14. French/English ratio for various types of publications in LEA

2.2.2.5 Abstracts: number of publications and indexes of specialization

Sixteen (16) abstracts were submitted in 2007 and published in the books of abstracts of scientific conferences. These abstracts targeted various disciplines as described on the Figure 15. Full references of these publications are shown in annex 13.

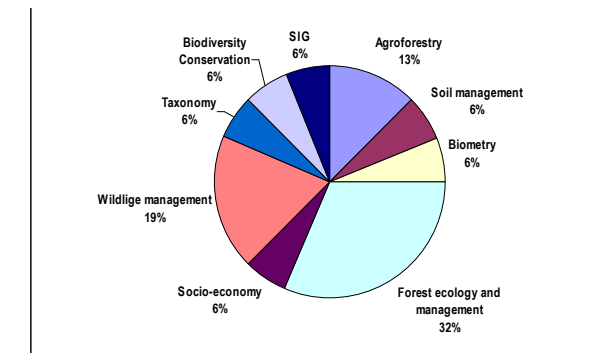


Figure 15. Indexes of publications specialization in the books of abstracts 2007

2.2.2.6 Technical Reports and newsletter in 2007

Four (4) technical reports and 1 newspaper were published by researchers of LEA in 2007. Full references related to these publications are shown in annexes 14 and 15. .

3. Conferences & workshops in 2007

3.1 Conferences organised by LEA

Two main Conferences were organized by the LEA during 2007: The Benin Rangelands Conference (ABEPA) in November and the 2nd Workshop on Protected areas. Several scientific progress meetings were held in various parts of the laboratory in 2007.

3.2 Participation at the conference

In 2007, researchers of LEA have participated in 39 conferences. About 67 % of these conferences were held in Africa (Benin, Mali, Senegal, Nairobi and South Africa), 27 % in Europe (United Kingdom, Germany, and Belgium) and 6 % in USA (Fig. 16). Details related to these conferences/workshops are shown in annexes 12 and 13.

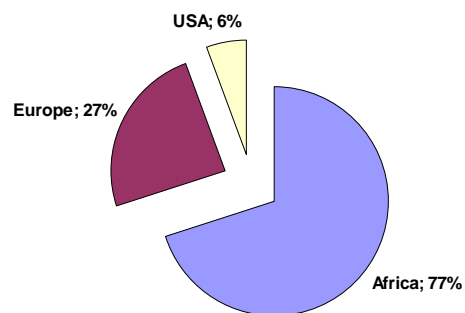


Figure 16. Level of participation of LEA's researchers to international conferences in 2007

4. Research projects and research grants at LEA in 2007

In 2007, research activities in LEA were mainly financed by European Union (DADOBAT-UE and SUN-UE: 9 %), international co-operation projects (VIIR's Own Initiative Program and BIOTA: 9) and international foundations and institutions (small research grants: 69 % and travel grants: 13 %) (Fig. 17). Most of the PhD and MSc students as well as senior scientists of LEA are involved in these projects for their research activities. Details (objectives, beneficiaries, etc.) on these projects and grants are shown in annexes 16, 17 and 18.

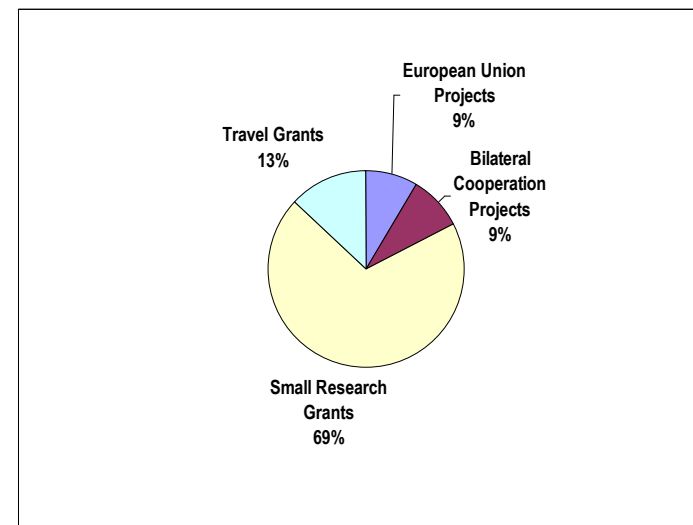


Figure 17. Spectrum of research funding in 2007

5. Human resources and visiting research in LEA in 2007

The LEA human resources counts in 2007 about 20 main investigators and senior scientists, 11 PhD students, 9 MSc and 11 agronomist degree students actively participating to research activities within the laboratory. Moreover, 5 technicians and 3 drivers are often associated for the fieldworks. Details about these human resources are shown on the web site of LEA (<http://www.leabenin-fsauac.net>).

Furthermore, in 2007, LEA has welcomed 51 researchers as visitors (Fig. 18 & 19), with 69 % from Europe: France (31 %); Germany (36 %), Switzerland (2 %). About 30 % are from Africa: Benin (2 %), Burkina Faso (8 %), Côte d'Ivoire (8 %), Togo (2 %), Senegal (2 %), Nigeria (8 %). The remaining are from USA (1 %). Full details about these visitors are shown in annex 19.

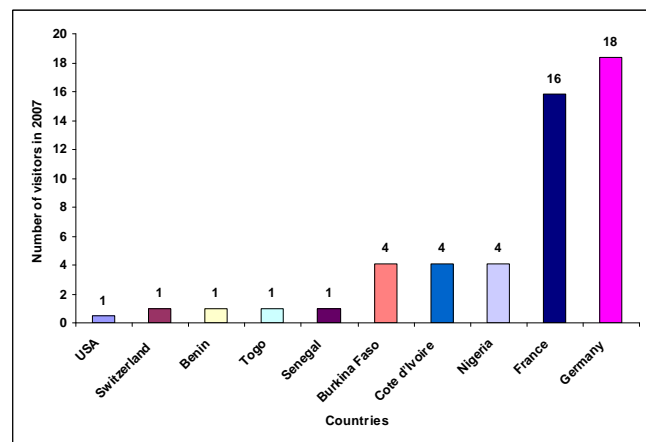


Figure 18. Visiting researchers welcomed by the LEA in 2007 at Country scale

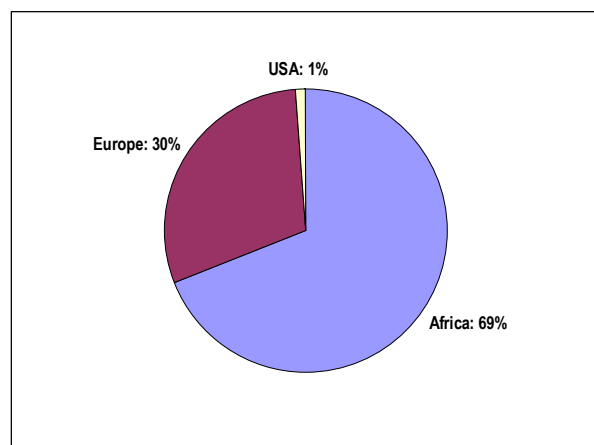


Figure 19. Visiting researchers welcomed by the LEA in 2007 at Continental scale

6. General discussion & conclusion

Various types of publications were produced by researchers of LEA ranging from thesis to publications in peer review journals, proceedings, technical reports and newsletters.

Researchers used to publish in collaboration with scientists abroad. Most of the scientific articles were published within international teams (52 %) and national ones (44 %). At a continental scale, the most important publications have been co-published with scientists from Europe (53 %) following by the ones from Africa (mostly Benin) (42 %), USA (4 %) and Australia (1 %). This implies that LEA has an international recognition in the field of scientific research. Otherwise, these results globally reflect the spectrum of intensity in the LEA's partnership patterns at scales of nations and continents. Differences in magnitudes from Europe to Australia and from Belgium to France express gradient in abilities of each continent/country to cooperate in various scientific fields with the LEA, ranging from erecting human resources (PhD, MBa, Technocrats) to building scientific programs and projects for development. However, a particular accent has to be focused on research collaboration with African research institutions since no articles were published within a regional team. Indeed, regional scientific collaborations should be developed for the following years since Benin share with its neighbouring countries similar research problems which need regional solutions and then should be solved regionally through research activities involving laboratories in the region.

LEA is specialized in many field of research as shown through the calculated percentages of specialization indexes of different types of publications. Indeed, research activities performed in the laboratory in 2007 were diversified and have mainly targeted disciplines such as Ethnobiology, Biometry, Plant Breeding, Molecular Biology, Biological conservation, Taxonomy, Animal science, Forest and plant ecology, Wildlife management and Grass and Forage science. LEA appears to be a research group with various fields of activities which need to be well developed. Moreover, increasing efforts appeared in the field of Molecular Biology (i.e. 34%) compared to Ethnobotany and others. In this new challenge, as far as silicon transporters in rice are found by Japanese scientist (Prof. Ma Jian Feng and teams), tropical grass and fodders Biology's field is expected to be well developed. Further tools based on molecular biology for improving livestock production are questionable.

The outputs from research activities performed in 2007 have yielded in 41 scientific publications in peer-reviewed journals (published: 9; in press: 9; under review: 22), 21 articles in proceedings, 16 abstracts in the books of abstract, 4 technical reports and 1 newspaper. Better, 57 % of articles in peer review journals were (will be) published in the

journals having an Impact Factor. More and more researchers are trying to publish their research outputs in peer review journals having an Impact Factor. As such, LEA can be considered as a leading research institution and a centre of excellence in the field of biodiversity and natural resources management and conservation.

Research in LEA is mainly supported by international projects and small research grants provided by European Union and international foundations and institutions, respectively. That makes sense as far as research funding by developed countries is opened to developing countries like Benin. In such a North-South funding system researchers in South have to expect their government to be at the right side to avoid political crisis with donor countries with its impacts on research programmes in the South as it had been the case for Togo in a past years. Laboratory in developing countries like Benin should always look for or develop cooperation with those in developed countries to get fund for their research programmes and to be linked to technology and international scientific events. Skill to write good research project and also many of that should be recommended to expect some of those projects to be eligible for funding. The basic issue to overcome lack of human resource to write successful project is to build and develop research capacity by training more and more PhD students as most of the publication in the Labs are done by young researchers during their PhD work.

Based on our experience, the policy of LEA is to strengthen existing partnerships and look for other opportunities in Africa, Europe, America, Asia and in Oceania in order to:

- (1) continue monitoring biodiversity at regional level;
- (2) develop the conservation and domestication strategies for some edible and medicinal forest resources;
- (3) develop germplasm collection of some agroforestry trees (multipurpose trees) for various purposes based on the genetic and agromorphological traits variations found in these species;
- (4) facilitate actors in seed/seedling systems to provide agroforestry trees' germplasm with high utility to farmers;
- (5) develop rural areas for plant material geared to specific production in order to improve human diet and;
- (6) start with grafting programs of some agroforestry trees for the specific purposes,

- (7) monitor protected areas (both state and community conservation area) and their components with regard to climate change and key biodiversity areas;
- (8) develop guidelines for fieldwork in applied ecology for para ecologists;
- (9) monitor threatened and endangered plants and animals species at regional level;
- (10) build capacity in research;
- (11) develop curricula in the field of applied ecology for a regional training purposes.

7. References

- <http://scientific.thomson.com/products/wos/>
- www.leabenin-fsauac.net
- www.notesdecologie.bj.refer.org
- www.fsa.bj.refer.org
- Thesis in LEA in 2007 (cf. annexes: PhD, agronomist degree, DESS and MSc thesis)
- Publications in LEA in 2007 (cf. annexes)
- Proceedings in LEA in 2007 (cf. annexes)
- Guidelines for UAC scientific report (Prof Sinsin Brice/ Vice Chancellor For Research, UAC)

8. Annexes

Annex 1: Ongoing PhD thesis (since or before 2007)

N°	Student full name	Level	Research topics	Fields of Research
1	Nago Sédjro Gilles Armel	2 nd year/Fsa	Savannah amphibians along a disturbance gradient	Wildlife /protected areas management
2	Etotépé A. Sogbohossou	1 st year/Fsa	Ecology, ethology, morphology and phylogenetics of lions (<i>Panthera leo</i> Linnaeus 1758) in Pendjari National Park, Northern Benin	
3	Vodouhè Fifanou	2 nd year/Fsa	Exploitation des Produits Forestiers Non Ligneux et Conservation de la Biodiversité Locale de la Réserve de Biosphère de la Pendjari	
4	Nobime Georges	3 rd year/Flash	Les facteurs écologiques et éthologiques déterminants pour la conservation du cercopithèque à ventre rouge <i>Cercopithecus e. erythrogaster</i> au Bénin	
5	Azizou El-Hadj Issa	3 rd year/Flash	Facteurs déterminants de cogestion pour la conservation des ressources naturelles de la réserve de biosphère transfrontalière du W/Bénin	
6	Morou Boubé	3 rd year/Flash	Impacts de l'occupation des sols dans la Réserve sur l'habitat de la girafe et enjeux pour la sauvegarde du dernier troupeau de girafe de l'Afrique de l'Ouest	
7	Teka Oscar	2 nd year/Allemagne	Processus évolutifs du littoral du Bénin comme base de gestion intégrée	Landscape management
8	Mama Djaouga	3 rd year/Flash	Mutations spatio-fonctionnelles des systèmes agropastoraux dans les communes de Kalalé-Nikki, Gogounou-Kandi au Nord-Est du Bénin: essai de cartographie et de modélisation	
9	Houessou Laurent	1 st year/Fsa	Indicators of sustainability at landscape, habitat and species scale for providing a decision support tool for politician and management workers	
10	Houngbo Emile	4 th year/Flash	Dynamique de pauvreté et de conservation de l'environnement en milieu rural au Bénin	
11	Agbani Onodjé Pierre	3 rd year/Flash	Etat de conservation et viabilité des populations de quelques espèces ligneuses soudanaises menacées du Bénin	Agroforestry
12	Yabi Fidèle Ibouraïma	3 rd year/Flash	Analyse de l'agroforesterie à base de l'anacardier et des contraintes climatiques sur son développement dans le Centre du Bénin	

N°	Student full name	Level	Research topics	Fields of Research
13	Delvaux Claire	5 th year:Ugent	Eco-physiology of the recovery of 12 medicinal tree species after bark harvesting in the Monts Kouffé woodland of Benin	
14	Maïki Rafiou	1 st year/Fsa	Evaluation de la durabilité écologique et socio-économique des systèmes de cultures sédentarisés à base d'igname : Développement des modèles bio-économiques	
15	Deleke Koko Kafui Inès Edna	1 st year/Fsa	Etude ethnobotanique et phytochimique des plantes galactogènes utilisées en médecine traditionnelle dans la Zone Cynégétique de la Pendjari	Ethnobotany
16	Ekue Marius R.M.	2 nd year/Allemagne	Ethnobotanical knowledge, Ecological and Genetic diversity assessment of ackee (<i>Blighia sapida</i> König) in Benin	
17	Avocevou Carolle	2 nd year/Fsa	Pour une meilleure conservation de <i>Pentadesma butyracea</i> Sabine au Bénin : étude de la viabilité des populations de l'espèce à travers des données écologiques et socio-économiques	Forest and plant ecology
18	Toko I. Ismaïla	3 rd year/Flash	Etude de la variabilité spatiale de la biomasse herbacée, de la phénologie et de la structure de la végétation dans le Bassin Supérieur de l'Ouémé en zone soudanienne du Bénin	
19	Hessou Comlan	2 nd year/Flash	Ecologie de <i>Caesalpinia Bonduc</i>	
20	Agonyissa Didier	3 rd year/Flash	Species diversity variation in sudanian <i>Isobertinia doka</i> and <i>Isobertinia tomentosa</i> woodland in relation to plot sizes and landuse pressure in Benin.	
21	Dan Céline	4 th year/Ulb	Description des groupements de lisière, cartographie de la végétation et valorisation des produits forestiers non ligneux de la forêt marécageuse de Lokoli (Bénin)	
22	Djodjouwin Laurent	4 th year/FSA	Dynamique de croissance des espèces introduites en plantations d'enrichissement dans le sud et le centre Bénin	
23	Djogbénu Paul	4 th year/Flash	Analyse des processus d'élaboration et de mise en oeuvre des plans d'aménagement participatif des forêts classées au Bénin: développement d'un modèle réussi et durable	
24	Houndantodé Justin	4 th year/Flash	Système de production des boues de vidange et valorisation en cultures maaïchères sur sol sableux du littoral : cas de l'amarante dans la commune de Sèmè Kpodji	
25	Zoffoun Alex	2 nd year/Fsa		Grasslands

Etude de la diversité des communautés végétales

N°	Student full name	Level	Research topics	Fields of Research
			envahissantes des cultures fourragères et de la dynamique de tallage des graminées des pâturages artificiels	science
26	Aboh Boya André	4 th year/Flash	Phytosociologie, écologie, potentialités et aménagement des pâturages naturels envahis par <i>Chromolaena odorata</i> et <i>Hyptis suaveolens</i> à Bétécoucou (Bénin)	

Annex 2: Completed MSc thesis in 2007

N°	Student full name	Diploma	Research topics	Fields of Research
1	Toudonou A. S. Christian	DEA	Utilisation and conservation of snakes : case study from ball python (<i>Python regius</i>) in Benin	Wildlife management
9	Kpera Nathalie	DEA	Ethnozoology et écologie des crocodiles au Bénin	
3	Bonou Alice	DEA	Economic assessment of Non Timber Forest Products (NTFP) in Sampéto, a surrounding village of the W National Park in Banikoara district	Agroforestry
4	Fandohan A. Belarmain	DEA	Ecology and Ethnobotany of tamarind (<i>Tamarindus indica</i> L.) in Benin	
5	Edon A.T. Solange	DEA	Biologie de reproduction et domestication du Baobab au Bénin	
6	Avakoudjo Julien	DEA	Soil degradation and restoration of degraded ecosystems in the northern Benin. A case study of W National Park and its Communal land in Karimama (Benin)	Soil management
7	Houehanou Thierry	DEA	Dynamique de <i>Azelia africana</i> Smith ex Pers. et <i>Anogeissus leiocarpa</i> (DC.) Guill. & Perr. dans la réserve de biosphère de la Pendjari et les utilisations ethno-médicinales	Forest and plant ecology
8	Assede Eméline Sessi P.	DEA	Evaluation de l'effet frontière sur la diversité floristique des limites de la zone cynégétique et des terroirs riverains du Parc National de la Pendjari (Bénin)	
2	Gouwakinnou N.	DEA	Population structure and ethnobotanical	

N°	Student full name	Diploma	Research topics	Fields of Research
	Gérard		uses of <i>Sclerocarya birrea</i> (A.Rich) Hochst in Karimama district (Benin)	

Annex 3: Completed agronomist engineer degree thesis in 2007

N°	Student full name	Diploma	Research topics	Disciplines
1	Adebi Yasmina	Ingénieur Agronome	Evaluation technique et socio-économique de la zone de chasse villageoise de Porga dans le secteur de Tanguiéta.	Management of protected areas
2	Sewade Clément	Ingénieur Agronome	Zones villageoises de chasse le long de la chaîne de l'Atacora (axe Tanguiéta-Batia): habitat, richesse faunique, cadre technique, gestion et viabilité	
3	Mehou Raymond-Bernard	Ingénieur Agronome	Gestion foncière dans les terroirs riverains de la Réserve de Biosphère de la Pendjari	
4	Monsi Agboka Félicienne	Ingénieur Agronome	Estimation des valeurs des produits non « commercialisés » : cas des plantes utilisées pour soins gynécologiques dans les terroirs de la Réserve de Biosphère de la Pendjari.	
5	Lawani Abelaziz	Ingénieur Agronome	Contribution du Bois Energie aux moyens d'existence durables des ménages riverains de la Réserve de Biosphère de la Pendjari"	
6	Tchibozo Roland	Ingénieur Agronome	Problématique de l'exploitation du bois de feu: aspects biologiques et aspects socio-économiques sur l'Axe Tanguiéta-Porga.	Agroforestry
7	Orou Boun Sabi Yari Richard	Ingénieur Agronome	Evaluation des systèmes agro-forestiers dans les terroirs riverains de la Zone Cynégétique de la Pendjari : Diversité des espèces autochtones, diversité des essences exotiques	

			et leur viabilité, intégration agricole.	
8	Ahoueya Judicaël	Ingénieur Agronome	Contribution à l'analyse socio-économique de l'exploitation des espèces de bois d'œuvre dans la commune de Ouassa-Péhunco	Ethnobiology
9	Djibril Bachirou	Ingénieur Agronome	Plantes gynécologiques: Disponibilité et valeur socio-économique des espèces les plus exploitées dans les terroirs riverains de la zone cynégétique de la Pendjari.	
10	Dossou-Yovo Hubert	Ingénieur Agronome	Diversité des plantes en relation avec les termitières dans le Parc National de la Pendjari et dans les terroirs riverains	Plant and forest ecology
11	Kossou Eric	Ingénieur Agronome	Identification et caractérisation des formations végétales parcourues par les éléphants d'Afrique (<i>Loxodonta africana</i>) dans la réserve de biosphère de la Pendjari.	

Annex 4: Completed MBA thesis in 2007

N°	Student full name	Diploma	Research topics
1	Djagoun A. Sylvestre	DESS	Diversité et étude ethnozoologique des petits mammifères de la Chaîne de l'Atacora et des terroirs riverains de la Réserve de Biosphère de la Pendjari
2	Koutou Méryas D.	DESS	Lectures écologique et socio-foncière comme outils de conservation durable des aires protégées : cas des forêts classées de la Lama et de Niaouli (Sud-Bénin).

Annex 5: Completed PhD thesis in 2007

N°	Student full name	Diploma	Research topics	Institution/Speciality
1	Djègo Julien	Doctorat unique de l'Université d'Abomey-Calavi	Phytosociologie de la végétation de sous-bois et impact écologique des plantations forestières sur la diversité floristique au sud et au centre du Bénin (2000-2004)	Ecole Doctorale des sciences de l'environnement
2	Djossa Bruno	Doctorat unique de l'Université d'Abomey-Calavi	Diversity and Ecology of bats species in Benin (2002-2006)	Ecole doctorale des Sciences agronomiques

Annex 6: Articles published in peer-review journal with IF

Disciplines	N°	Authors' Name	Title	Statute and Journals	Impact Factor
Taxonomy	1	Yorou S.N., Agerer R.	Type studies of three Tomentaloid fungi: <i>Tomentella radiosa</i> , <i>Tomentella cinereoumbriana</i> and <i>T. punicea</i> .	<i>Nova Hedwigia</i> 85: 521-539	0.603
Ethnobotany	2	Assogbadjo A.E, Glélé Kakai R., Chadare F.J., Thomson L., Kyndt T., Sinsin B. and Van Damme P.	Folk classification, perception and preferences of baobab products in West Africa: consequences for the species conservation and improvement.	<i>Economic Botany</i> 62 (1) xx-xx	0.449
Molecular Biology	3	Ekué M.R.M., Gailing, O., Hölischer D., Sinsin B., Finkaldehy R.	Population genetics of the cycad <i>Enocephalartos barteri</i> ssp. <i>barteri</i> (Zamiaceae) in Benin with notes on leaflet morphology and implications for conservation	<i>Belgian Journal of Botany</i> 141(1) xx-xx	0.208

Annex 7: Articles published in peer-review journal without IF

Disciplines	N°	Authors' Name	Title	Statute and Journals
Biometry	1	Glélé Kakai R., Palm R.	Data Driven Choice of The Classification Rule In Discriminant Analysis applied to isoberlinia Stands.	<i>West African Journal of Biophysics and Biomathematics</i> , 5(1): 21-38.
Ethnobotany	2	Zannou, A., Tossou, R.C., Vodouhé, S., Richards, P., Struik, P.C., Zoundjinképon, J., Ahanchédé, A. and Agbo, V	Socio-cultural factors influencing and maintaining yam and cowpea diversity in Benin.	<i>International Journal of Agricultural Sustainability</i> 5 (2-3)
Plant Breeding	3	R. Skirou, A. Zannou, G. Gbèhounou, L. Afouda et F.	Sélection des variétés de tomate (<i>Lycopersicon esculentum</i>) résistantes à la pourriture du collet causée par <i>Sclerotium rolfsii</i> au Sud	<i>Bulletin de la Recherche</i>

Disciplines	N°	Authors' Name	Title	Statute and Journals
		Assogba-Komlan.	Bénin.	<i>Agronomie</i> 55 : 8-16.
Taxonomy	4	Yorou S.N., Kōljalg U, Sinsin B. & Agerer R.	Studies in African theleporoid fungi 1. <i>Tomentella capitata</i> and <i>Tomentella brunneocystidia</i> , two news species from Benin (West Africa) with capitate cystidia	<i>Mycological Progress</i> 6: 7-18
	5	Yorou S.N., Agerer R.	<i>Tomentella furcata</i> a new species from Benin (West Africa) with basidia forming internal hyphae.	<i>Mycological progress</i> 6: 239-247
Grass and forage science	6	Brisso N., Houinato M., Adandédjan C. and Sinsin B.	Dry season woody fodder productivity in savannas.	<i>Ghanaian Journal of Animal Science</i> , Vol. 2 & 3 (1): 181- 185.

Annex 8: Articles in press in peer-review journal with IF

Disciplines	N°	Authors' Name	Title	Journals	Impact Factor
Molecular Biology	1	Yorou S.N., Kōljalg U & Agerer R.	ITS rDNA nucleotides-based phylogenetic analysis of tropical African Theleporales	Molecular phylogenetic and Evolution	3.528

Disciplines	N°	Authors' Name	Title	Journals	Impact Factor
	2	Assogbadjo A.E., Kyndt T., Glele Kakaï R. , Sinsin B., Gheysen G., Patrick Van Damme P.	Spatial and temporal genetic structuring of <i>Adansonia digitata</i> L. (Malvaceae) in the traditional agroforestry systems of West Africa.	<i>American Journal of Botany</i>	2.969
	3	Assogbadjo AE, Kyndt T., Sinsin B., Gheysen G., Patrick Van Damme P.	Human impact on genetic variation of multi-purpose tree species in parkland agroforestry systems of West Africa: Case study of baobab (<i>Adansonia digitata</i> L.)	<i>Heredity</i>	2.872
Ethnobiology	4	Assogbadjo A.E., Kyndt T., Chadare F.J., Sinsin B, Gheysen G , Eyog-Matig O. & Van Damme P.	Do indigenous classified morphotypes of baobab (<i>Adansonia digitata</i> L.) in West Africa match with genetic fingerprinting using AFLP?	<i>Agroforestry Systems</i>	0.921
	6	Akpona H.A., Djagoun C.A.M.S. & Sinsin B.	Ecology and ethnozoology of the three-cusped pangolin <i>Manis tricuspis</i> , (Mammalia, Pholidota) in the Lama forest reserve, Benin.	<i>Mammalia</i>	0.333
Grass and Forage Science	5	Kindomihou V., Meerts P. and Sinsin B.	Effect of moisture stress on leaf silicification in three tropical fodder grass species (<i>Pennisetum purpureum</i> , <i>Panicum maximum</i> Jacq and <i>Panicum maximum</i> C1)	<i>Tropical Grasslands</i>	0.478
Biometry	7	Glèlè Kakaï R., Palm. R.	Empirical Comparison Of Error Rate Estimators In Logistic Discriminant Analysis.	<i>Journal of Statistical Computation and Simulation.</i>	0.215

Annex 9: Articles in press in peer-review journal without IF

Disciplines	N°	Authors' Name	Title	Journals
Biometry	1	Gbangboche, A. B.; Glèlè Kakaï R.; Salifou S. Albuquerque L. G. Leroy, P. L.	Comparison of four models to describe the growth curve in West African Dwarf sheep.	<i>An International Journal of Animal Bioscience.</i>
Agroforestry	2	Ekué, M.R.M., Codjia J.T.C., Fonton, K.B., & Assogbadjo, A.E.	Diversity and preference on Non-Timber Forest Products: Case of the Otammari people in the region of Boukoumbe in North Benin.	<i>Bulletin de la Recherche Agronomique du Bénin</i>

Annex 10: Articles under review in peer-review journal with IF

Disciplines	N°	Authors' Name	Title	Journals	Impact Factor
Forest and plant ecology	1	Assogbadjo A.E., Glèlè Kakaï R., & Sinsin B	Structural characteristics as indicators of anthropogenic pressure on <i>Anogeissus leiocarpa</i> natural stands in the Wari-marò forest reserve (Benin)	<i>Folia Geobotanica</i>	1.196
	2	Djègo J. G. & Sinsin B.	Phytosociologie de la végétation de sous-bois et impact écologique des plantations forestières sur la diversité floristique dans la forêt classée de la Lama	<i>Biodiversity and Conservation</i>	1.423
	3	Djègo J. G. & Sinsin B.	Diversité floristique et Phytosociologie de la végétation de sous-bois au sud et au centre du Bénin	<i>Belgian Journal of Botany</i>	0.208
	4	Glèlè Kakaï R., Sinsin B.	Structure and spatial distribution patterns of two <i>Isoberlinia</i>	<i>South African Journal</i>	0.648

Disciplines	N°	Authors' Name	Title	Journals	Impact Factor
			Dominated communities in the Wari-Marò forest reserve (Benin)..	<i>of Botany</i>	
	5	Richards P., M. de Bruin-Hoekzema, S.G. Hughes, C. Kudadjie-Freeman, S. K. Offei, P. C. Struik, A. Zannou.	Seed systems for African food security: Linking molecular genetic analysis and cultivator knowledge in West Africa. Special Issue "Knowledge and technology management for sustainable development in Africa".	<i>International Journal of Technology Management.</i>	0.233
	6	Gaoue O.G. and Ticktin T.	Ecological variation affects demography more than non-timber forest product harvest for African dry zone mahogany	<i>Conservation Biology</i>	3.762
Ethnobiology	7	Gaoue O.G., Sack L. and Ticktin T.	Do Fulani traditional economics affect leaf economics? Functional traits of <i>Khaya senegalensis</i> , a heavily harvest trees across rainfall gradient in Benin	<i>Functional Ecology</i>	3.417
	8	Gaoue O.G. and Ticktin T.	The implications of Fulani people's ethnoecological knowledge of the impact of foliage harvest on <i>Khaya senegalensis</i>	<i>Economic Botany</i>	0.449
Wildlife management	9	Nobimè G. & Sinsin B.	Le cercopithèque à ventre rouge <i>Cercopithecus e. erythrogaster</i> Gray, 1866 : comportement et association avec les autres primates de la forêt classée de la Lama au Bénin	<i>Belgium Journal of Zoology</i>	0.333
	10	Nobimè G., Sinsin B. & Lèrnould J-M.	Spatial distribution and ecological factors determining the occurrence of the red-bellied guenon <i>Cercopithecus e.</i>	<i>Belgium Journal of Zoology</i>	0.333

Disciplines	N°	Authors' Name	Title	Journals	Impact Factor
			erythrogaster in Benin and Togo		
	11	Ayégnon D., Dangou J., Houinato M., Kidjo F. C., de Steffano M., Bogliani G., Assogbadjo A.E., Sinsin B.	Ecologie alimentaire de quelques grands herbivores du Parc National du W (Bénin) et leur rôle dans la dissémination des herbacées	<i>Belgian Journal of Zoology.</i>	0.333
Grass and Forage science	12	Kindomihou V., Meerts P., Sinsin B.	Silica concentration is related to other leaf traits but not to a specific anatomical tissue in Tropical fodder grass species	<i>Belgian Journal of Botany</i>	0.208
Biometry	13	Glèlè Kakaï R., Pelz D. R., Palm R.	On the efficiency of the linear classification rule in multi-group discriminant analysis.	<i>Journal of Statistical Computation and Simulation</i>	0.215

Annex 11: Articles under review in peer-review journal without IF

Disciplines	N°	Authors' Name	Title	Journals
Forest and plant	1	Glèlè Kakaï R., Assogbadjo A.E. & Sinsin B.	Régénération naturelle et caractérisation spatiale de <i>Pterocarpus erinaceus</i> Poir en zone soudanienne au Bénin	<i>Annales des Sciences Agronomiques du Bénin</i>
	2	Djogo J. G. & Sinsin B.	Mise en évidence des phytocénoses de sous-bois des plantations et des jachères du cordon sableux du sud-est du Bénin	<i>Revue Botanique de France</i>

Disciplines	N°	Authors' Name	Title	Journals
ecology	3	Djogo J. G. & Sinsin B.	Modifications climatiques du sous-bois induites par les plantations d'essences exotiques: quel impact sur la diversité floristique locale ?	<i>Annales de Botanique de l'Afrique de l'Ouest</i>
	4	Glèlè Kakaï R., Sinsin B. & Palm R.	Etude dendrométrique de <i>Pterocarpus erinaceus</i> Poir des formations naturelles de la Soudanienne au Bénin	<i>Agronomie Africaine</i>
Wildlife management	5	Djossa B.A., Fahr J., Kalko E.K. V. Sinsin B.	Fruit selection and effects of seed handling by flying foxes on germination rates of shea trees, a key resource in northern Benin, West Africa	<i>Ecotropica</i>
Biometry	6	Glèlè Kakaï R., Pelz D. R.	Asymptotic error rate of linear, quadratic and logistic rules in multi-group discriminant analysis.	<i>Global Journal of Mathematical Sciences</i>
	7	Glèlè Kakaï R., Pelz D. R., Palm R.	Relative efficiency of non parametric error rate estimators in multi-group linear discriminant analysis.	<i>East African Journal of Statistics.</i>
Ethnobiology	8	Akpona J-D., Glèlè Kakaï R., Sinsin B.	Ethnobotanique, structure et statut écologique des espèces de brosse végétale dans les formations naturelles de la région Sud du Bénin	<i>Annales des Sciences Agronomiques</i>
Grass and Forage science	9	Kindomihou V., Sinsin B., Meerts P., Ma J. F.	Effect of Phosphorus and Nitrogen on leaf Silica accumulation in five tropical fodder grass species in Benin.	<i>Biotechnology, Agronomy, Society, Environment</i>

Annex 12: Publications in proceedings

Disciplines	N°	Authors' Name	Title	Statute and Review
	1	Assogbadjo A.E. & Sinsin, B.	Caractérisation et stratégies de	In: Mayaka T.B., De longh H. and Sinsin B. (eds) (2007). <i>Ecological</i>

Disciplines	N°	Authors' Name	Title	Statute and Review
Agroforestry			conservation du baobab (<i>Adansonia digitata</i> L.) dans les paysages agraires du Bénin.	<i>restoration of African Savanna Ecosystems</i> . Proceedings of the third RNSCC International Seminar, 6 Feb, Cotonou, Benin. CEDC/CML, Leiden University. pp 35-50.
Ethnobiology	2	Assogbadjo A.E., Codjia J.T.C Sinsin, B. & Van Damme P. (2007).	Connaissances ethnobotaniques et valorisation du baobab (<i>Adansonia digitata</i>) pour la sécurité alimentaire des populations rurales au Bénin.	In : Vodouhè S.R., Atta-Krah K., Achigan-Dako G.E., Eyog-Matig O. and Avohou H., editors, 2007. Plant Genetic Resources and Food Security in West and Central Africa. Regional Conference, 26-30 April 2004. Bioversity International, Rome, Italy. pp : 66-77. ISBN 978-92-9043-750-5
Plant physiology	3	Kindomihou Valentin, Ma Jian Feng, Sinsin Brice, Meerts Pierre	Do silicon fertilizers improve the fodder value of tropical grass species?	Proceedings: <i>International IGC-IRC Congress</i> , 29 th June - 5 th July, Hohhot, China
	4	Sinsin Brice, Kindomihou Valentin, Bako Idrissou, Saïdou Aliou, Houinato Marcel, Essou Jean-Pierre	Test of restoration of guineo-sudanian pastures invaded by <i>Chromolaena odorata</i> and <i>Hyptis suaveolens</i> in Benin	Proceedings: <i>International IGC-IRC Congress</i> , 29 th June - 5 th July, Hohhot, China
	5	Kindomihou Valentin, Meerts Pierre, Sinsin Brice	Patterns in tropical grass silicification: response to substrate fertilization	Proceedings: <i>International IGC-IRC Congress</i> , 29 th June - 5 th July, Hohhot, China
Socio-economy	6	Teka O., Vogt J., Kindomihou V., Houessou L., Sinsin B.	Socio-economic and Ecological Analysis of the Use of Controlled Fires in Pastoralism: Cases of two Agro-ecological Zones of Benin.	In: Eric Tielkes. Utilisation of diversity in land use systems: sustainable and organic approaches to meet human needs: International research on food security, natural resources managements and rural development. <i>Proceedings of Tropentag 2007</i> , Witzenhausen. ISBN: 3-86727-372-3. 978-3-86727-372-5. 5p. http://www.tropentag.de/2007/abstracts/full/269.pdf .
Soil management	7	Toko I. & Sinsin B.	Les phénomènes d'érosion et d'affaissement naturels des sols (Dongas)	In : Fournier A., Sinsin B. & Mensah G.A. (Editeurs). <i>Quelles aires protégées pour l'Afrique de l'Ouest? Conservation de la biodiversité et</i>

Disciplines	N°	Authors' Name	Title	Statute and Review
			et leur impact sur la régénération végétale dans le Parc National du W"	<i>développement</i> . Ouvrage issu du séminaire de Parakou (Bénin), 14-19 avril 2003, organisé avec le soutien du gouvernement du Bénin, de l'UNESCO, de la FAO, de l'IRD, de la région Centre (France) et de la Banque mondiale. ISSN: 0767-2896, ISBN: 978-2-7099-1634-9.
	8	Kindomihou V., Ambouta Karimou J-M., Sinsin B.	Diversity of Soil Fertility Management Practices in Sudanian Zone of Benin (Western Africa).	In: Eric Tielkes. Utilisation of diversity in land use systems: sustainable and organic approaches to meet human needs: International research on food security, natural resources managements and rural development. <i>Proceedings of Tropentag 2007</i> , Witzenhausen. ISBN: 3-86727-372-3. 978-3-86727-372-5. 5p. http://www.tropentag.de/2007/abstracts/full/464.pdf .
	9	Kindomihou V., Ambouta Karimou J-M, Nelen J., Kpetere J., Kawa R., Guero Y., Banoïn M., Sinsin B.	Plans de Fumure Organique pour l'Amélioration de la Gestion de la Fertilité des Sols en Zone Soudanienne du Nord-Bénin. (Abstract p.225).	In : <i>Résumés/abstracts</i> du premier colloque de l'UAC des Sciences, Cultures et Technologies. p 223.
Disciplines	N°	Authors' Name	Title	Statute and Review
Wildlife management	10	Assogbadjo A.E. & Sinsin B	Les populations de primates menacés dans la forêt de Lokoli (Bénin).	In: Fournier A., Sinsin B. & Mensah A.G. (2007). Quelles aires protégées pour l'Afrique de l'Ouest? <i>Actes du Séminaire International sur l'aménagement et la gestion des aires protégées d'Afrique de l'Ouest</i> pp 256-261. Ed. IRD, ISBN 978 2 7099 1634 9; ISSN 0767
	11	Kassa B., Nobimè G., Hanon L., Assogbadjo A.E. & Sinsin B.	Caractéristiques de l'habitat du singe à ventre rouge (<i>Cercopithecus erythrogaster</i>) dans le Sud-Bénin.	In: Fournier A, Sinsin B. & Mensah A.G. Quelles aires protégées pour l'Afrique de l'Ouest? <i>Actes du Séminaire International sur l'aménagement et la gestion des aires protégées d'Afrique de l'Ouest</i> . pp 262-271. Ed.

Disciplines	N°	Authors' Name	Title	Statute and Review
				IRD, ISBN 978 2 7099 1634 9; ISSN 0767 2896.
	12	Nobime G. & Sinsin B.	Diversité des primates dans la forêt classée de la Lama (Bénin)	In: Fournier A., Sinsin B. & Mensah A.G. (2007). Quelles aires protégées pour l'Afrique de l'Ouest? <i>Actes du Séminaire International sur l'aménagement et la gestion des aires protégées d'Afrique de l'Ouest</i> pp 247-255. Ed. IRD, ISBN 978 2 7099 1634 9; ISSN 0767 2896.
	13	Djossa B. A., Fahr J., Kalko E.K. V. & Sinsin B.	Dynamique des populations de roussettes dans un environnement sous emprise humaine au Nord Bénin	In: Proceedings of the 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin. p 270.
	14	Codjia, J.T.C, Ekué, M.R.M. & Condé S.K. 2007	L'habitat du phacochère (<i>Phacochoerus africanus</i>) dans la forêt classée des Trois Rivières au Bénin.	In : Fournier A., Sinsin B. & Mensah G.A. (Editeurs). <i>Quelles aires protégées pour l'Afrique de l'Ouest? Conservation de la biodiversité et développement</i> . Ouvrage issu du séminaire de Parakou (Bénin), 14-19 avril 2003, organisé avec le soutien du gouvernement du Bénin, de l'UNESCO, de la FAO, de l'IRD, de la région Centre (France) et de la Banque mondiale. ISSN: 0767-2896, ISBN: 978-2-7099-1634-9. p 238-246.
	15	Ekué, M.R.M. Codjia J.T.C. & Zepou O.F. 2007	L'alimentation du potamochoère (<i>Potamochoerus porcus</i>) dans la forêt classée de la Lama au Bénin.	In : Fournier A., Sinsin B. & Mensah G.A. (Editeurs). <i>Quelles aires protégées pour l'Afrique de l'Ouest? Conservation de la biodiversité et développement</i> . Ouvrage issu du séminaire de Parakou (Bénin), 14-19 avril 2003, organisé avec le soutien du gouvernement du Bénin, de l'UNESCO, de la FAO, de l'IRD, de la région Centre (France) et de la Banque mondiale. ISSN: 0767-2896, ISBN: 978-2-7099-1634-9. p 508.
Forest and	16	Natta A.K., Sinsin B. & van der	Is the vegetation of the riverain forests of protected areas of Benin more diverse	In : Fournier A., Sinsin B. & Mensah G.A. (eds): <i>Quelles aires protégées pour l'Afrique de l'Ouest?</i> Ouvrage issu du Séminaire de ; Parakou

Disciplines	N°	Authors' Name	Title	Statute and Review
		Maesen L.J.G. 2007.	than that of spaces that are not protected?	(Bénin), 14 -19 avril 2003. p 580. Organisé par le soutien du Gouvernement du Bénin, l'Unesco, la FAO, l'IRD, La Région Centre (France) et la Banque Mondiale. IRD éditions, Collection Colloques et Séminaires, Paris 2007, 607 p.
plant ecology	17	Natta A.K.	Restoration of riparian forests ecological diversity in landscape management plans: issues and lessons from Benin.	In: Mayaka T.B., De longh H. & Sinsin B. (eds.) (2007), pp 21 – 34. <i>Ecological Restoration of African Savanna Ecosystems</i> . Proceedings of the third RNSCC International Seminar, 6 Feb, Cotonou, Benin. CEDC - Cameroon /CML, Leiden University, the Netherlands. 156
	18	Toko I., Sinsin B. & Orthmann B.	Ecologie et dynamique temporelle d' <i>Afrotrilepis pilosa</i> sur les inselbergs de Wari-Marou dans la zone soudano-guinéenne du Bénin.	<i>Actes du XVIII^{ème} Congrès de l'AETFAT sur "Systématique et Conservation"</i> .
	19	Yorou SN & Agerer R.	Thelephorales form ectomycorrhizae in northern Guinean seasonal forests of West Africa	Annual Meeting of the British Mycological Society, Manchester, September 12 th -19 th 2007.
	20	Djego J. G. & Sinsin B.	Impact des plantations à base d'essences exotiques sur la flore locale.	In: Mayaka T.B., De longh H. and Sinsin B. (eds) (2007). <i>Ecological restoration of African Savanna Ecosystems</i> . Proceedings of the third RNSCC International Seminar, 6 Feb, Cotonou, Benin. CEDC/CML, Leiden University. pp 65-78.
	21	Djego J. G. & Sinsin B.	Structure et composition floristique de la forêt classée de la Lama	In: Fournier A., Sinsin B. & Mensah A.G. (2007). Quelles aires protégées pour l'Afrique de l'Ouest? <i>Actes du Séminaire International sur l'aménagement et la gestion des aires protégées d'Afrique de l'Ouest</i> . Ed.

Disciplines	N°	Authors' Name	Title	Statute and Review
				IRD, ISBN 978 2 7099 1634 9; ISSN 0767.12p.

Annex 13: Abstracts in books of abstracts

Disciplines	N°	Authors' Name	Title	Statute and Review
Agroforestry	1	Kindomihou V., Ambouta Karimou J-M., Nelen J., Kawa R., Guero Y., Banoin M., Sinsin B.	Diversité, Caractérisation et Typologie opérationnelle des Exploitations Agricoles pour l'Amélioration des Pratiques de Gestion de la Fertilité des Sols en Zone Soudanienne du Bénin. (Abstract p.248).	Abstract book, 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin. p 248.
	2	Hessou C., Glèlè Kakaï R., Assogbadjo A. E. & Sinsin B.	Test de germination des graines de l'espèce menacée <i>Ceaesalpinia bonduc</i> (L.) Roxb au Bénin.	Abstract book, 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin. p 24
Soil management	3	Kindomihou V., Ambouta Karimou J-M, Nelen J., Kpetere J., Kawa R., Guero Y., Banoin M., Sinsin B.	Plans de Fumure Organique pour l'Amélioration de la Gestion de la Fertilité des Sols en Zone Soudanienne du Nord-Bénin. (Abstract p.225).	Abstract book, 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin. p 223.
Biometry	4	Glèlè Kakaï R.	Macro-procédure Matlab et Minitab du test de parallélisme des droites de régression: applications agronomiques.	Abstract book, 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin. p 162.
	5	Fandohan B., Glèlè Kakaï R., Sinsin B.	Caractérisation dendrométrique de sept	Abstract book, 1 st Conference on Sciences, Cultures and Technologies,

Disciplines	N°	Authors' Name	Title	Statute and Review
Forest ecology and management		2007	essences ligneuses médicinales dans la forêt classée de Wari-Marou au Bénin.	University of Abomey Calavi, Benin. p 231
	6	Djogbenou P. C., Sinsin B., Glèlè Kakaï R.	Evaluation multicritère des plans d'aménagement participatif des forêts classées au Bénin et développement d'un modèle réussi et durable.	Abstract book, 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin. p 235.
	7	Djaouga M. Toko I., Houndagba C J., Sinsin B.	Pression urbaine et évolution des formations naturelles en milieu périurbain à Parakou au Bénin.	Abstract book, 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin 12 p.
	8	Yorou SN & Agerer R.	From fundamental biology to applied ecology: How research on ectomycorrhizae can help conserving African forest trees	Abstract book, 18 th AETFAT Congress, Yaoundé (Cameroon), February 26 th to March 2 nd 2007, p. 66.
	9	Yorou SN, De Kesel A & Sinsin B.	Chorology of larger fungi in Benin with regard to vegetation types and floristic composition	Abstract book, 18 th AETFAT Congress, Yaoundé (Cameroon), February 26 th to March 2 nd 2007, p. 66.
Socio-economy	10	Mensah E. R., Ibrahimy A., Mensah G. A., Glèlè Kakaï R., Pomalegni S. C., Kpade C. P	Viabilité économique et viabilité technique des aulacodécultures au Bénin.	Abstract book, 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin. p 297.
Wildlife	11	Mensah E. R., Ibrahimy A., Mensah G. A., Glèlè Kakaï R., Pomalegni S. C., Kpade C. P.,	Viabilité des élevages d'aulacodes et détection précoce de ceux à risque au Bénin.	Abstract book, 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin. p 298.

Disciplines	N°	Authors' Name	Title	Statute and Review
management	12	Ekoué, M.R.M., Bekker J.P., Tchiboza S., Sinsin B.	Monitoring of the rare Beecroft's flying squirrel (<i>Anomalurus beecrofti</i> Fraser, 1853) in the sacred forest of Kikélé, Benin	Abstract book, 10 th African Small Mammals Symposium (ASMS). IITA, Abomey-Calavi, Benin; 20-25 August.
	13	Ekoué, M.R.M. & Bekker J.P.	Diversity of shrews in different habitat of South Benin	Abstract book, 10 th African Small Mammals Symposium (ASMS). IITA, Abomey-Calavi, Benin; 20-25 August.
Taxonomy	14	Yorou SN & Agerer R.	Combining molecular and morphological data for species discrimination in the most complex fungal group.	Abstract book, 18 th AETFAT Congress, Yaoundé (Cameroon), February 26 th to March 2 nd 2007, p. 66.
Biodiversity Conservation	15	Yorou NS, De Kesel, A., Sinsin B. & Peter Neuenschwander	The Red List of threatened larger fungi of Benin (West Africa)	Abstract book, 1 st International Workshop on sustainable uses and conservation of larger fungi: Cordoba, Spain, December 10 th -16 th 2007.
SIG	16	Djaouga M., Houndagba C J., Thomas O., Sinsin B.,	Contribution des SIG et de la Télédétection à l'analyse du devenir des systèmes agropastoraux dans le Borgou : Cas de la commune de Parakou	Abstract book, 1 st Conference on Sciences, Cultures and Technologies, University of Abomey Calavi, Benin 12 p.

Annex 14 : Technical Reports in 2007

N°	Authors' Name	Title	Statute and Review
1	Sogbohossou E.A. & Tehou A...	Dénombrement des lions dans la Réserve de Biosphère de la Pendjari. Rapport Technique	Projet Pendjari – PROCGRNCENAGR EF. 35 p.
2	Sodjinou E., Kouhplanou G., Glèlè Kakai R.	Etude de la viabilité des exploitations avicoles modernes et semi-modernes du sud-benin : mode de financement et détection précoce des exploitations à risque. <i>Première partie : viabilité, mode de gestion et détection précoce des exploitations avicoles à risque</i>	APPRA, Scientific Report, 35p.
3	Ekoué, M.R.M	Exploring the genetic diversity of the endogenous agroforestry species ackee (<i>Bignonia sappida</i> König) in Benin	Rehamsied International, 39p
4	Ehouinsou M., Mensah G. A., Hourinato M., Olatia M., Lawani M.O., & Pomalégné C.	Valoriser les épiluchures de manioc dans l'alimentation des petits ruminants et des aulacodes d'élevage.	Bibliothèque National du Bénin. B. – ISBN :13978- 99919-76- 2. 8p

Annex 15 : Newsletter in 2007

N°	Authors' Name	Title	Statute and Review
1	DOSSA, S.J., SINSIN, A. B. & MENSAN, G. A.	Conflicts and social dilemmas associated with the incidental capture of marine turtles by artisanal fishers in Benin	In Marine Turtle Newsletter 116: 10-11pp

Annex 16 : Research projects in LEA in 2007

N°	Title of the project	Sources of Funding	Objectives	Status
1.	Domestication And Development Of Baobab And Tamarind (DADOBA)	European Union	<ol style="list-style-type: none"> 1. Evaluation and characterisation of germplasm collected in different ecological zones in Benin, Mali and Senegal; 2. Eco-physiological characterisation of field and greenhouse-grown material; 3. domestication of superior germplasm material; 3. Development of adapted cropping techniques; development of adapted plant material for introduction into (traditional and improved) agroforestry systems; 4. Evaluation of nutritional/medicinal composition of different plant parts; 5. Improvement of processing/transformation of the species' products; 6. Development of (inter-)national marketing strategy. 	Ongoing
2.	Sustainable Use of Natural resources and Vegetation in West-Africa (SUN)	European Union	<ol style="list-style-type: none"> 1. To improve the understanding of vegetation dynamics and their causal factors at local scale 2. To extrapolate these results from local to regional (West African) scale by use of a database of scientifically gathered vegetation data and remote sensing 3. Local knowledge and socio-economic studies will identify economic instruments to improve policies and redress impediments to sustainable use 4. Development of new decision support tools in order to organise and target already available scientific data and make them freely available via the internet. This includes a vegetation database. 5. Development of new decision support tools in order to organise and target already available scientific data and make them freely available via the internet. This includes an overview of indicators of sustainable use 6. Development of new decision support tools in order to organise and target already available scientific data and make them freely available via the internet. This includes a GIS tool. 7. Establishment of practical management and restoration 	Ongoing

N°	Title of the project	Sources of Funding	Objectives	Status
			<p>actions in selected areas – planned in close collaboration between scientists and local people and carried out by local people with support from scientists.</p> <p>8. Dissemination</p>	
3.	Biodiversity transect Africa (BIOTA)	German Federal Ministry of Education and Research within the frame of the BIOLOG programme	<ol style="list-style-type: none"> 1. Comparison of primary and secondary grassland and rain forests with small isolated fragments. 2. Establishment of biodiversity observatories for long term monitoring, the main focus being the effects of man-made changes on biodiversity. 3. Critical selection of significant interfaces of the trophic network of the tropical rain forest and savannas plus their replacement communities: plant-pollinator systems, forest fragmentation and seed dispersal, exchange of atmospheric compounds, regeneration of tree species, the decline in anurans, and the diversity of insects and other major arthropods. 4. Investigation of the potential for sustainable use of forest and savanna ecosystems. 5. To attend a better understanding of the complex consequences of degradation and fragmentation, especially at the level of critical trophic and reproductive interfaces. 6. To provide useful tools and methods for <i>rapid assessment</i> procedures for selected systems. 7. To develop the necessary capacity, data management and support infrastructure. 8. To monitor and assess taxonomic input to create new and user-friendly field identification tools for use by both specialists and parataxonomists. 	Ongoing
4.	VLIR-Own Initiative	Belgium	<ol style="list-style-type: none"> 1. Sustainable management of major medicinal plant through monitoring of their regeneration and ecology 2. Capacity building for scientists in the field of medicinal plants management and monitoring. 3. Study of bark harvesting processes on the species viability. 	Completed in 2008

N°	Title of the project	Sources of Funding	Objectives	Status
			4. Study of ecology and regeneration processes for a sustainable management of major medicinal plant species.	

Annex 17 : Research Grants in 2007

N°	Title of Grant	Beneficiaries	Status
1	Programme sur la Conservation des Plantes Médicinales Menacées par la Création des Jardins Botaniques Villageois dans la Nord-Bénin.	1. Sogbohossou Etotépé	Ongoing
2	International Foundation for Sciences (IFS) Grants (Renew)	1. Assogbadjo Achille 2. Glèlè Kakaï Romain 3. Gaoué Orou Gandé	Ongoing
3	Idea Wild Grants for materials supplying (USA)	1. Assogbadjo Achille	Ongoing
4	King Leopold III Fund for Nature Conservation and Exploration	1. Assogbadjo Achille	Ongoing
5	The Dennis Stanfield Memorial Fund/Linnean Society of London (UK)	1. Assogbadjo Achille	Ongoing
6	Rufford Small Grant (RSG) for Nature Conservation	1. Yorou Nourou S. 2. Akpona Hugues 3. Assogbadjo Achille	Ongoing
7	British Ecological Society (BES)/ Overseas Bursaries and Fellowship (OBF)	1. Yorou Nourou S. 2. Akpona Hugues 3. Assogbadjo Achille 4. Gaoué Orou Gandé	Ongoing
8	AFORNET – African Forest Research Network	1. Zannou Afio	Ongoing
9	PGFTR /DFRN/ MPEN (Benin)	1. Zannou Afio	Ongoing
10	Rothamsted International African Fellow Programme	1. Ekué Marius R.M.	Completed

N°	Title of Grant	Beneficiaries	Status
11	The Department for Environment, Food & Rural Affairs (DEFRA) and Fauna & Flora International (FFI); <i>Flagship Species Fund Small Grants Programme</i> , UK	1. Ekué Marius R.M.	Completed
12	Art & Science Advisory Council, University of Hawaii at Manoa (USA)	1. Gaoué Orou G.	Completed
13	Ecology, Evolution and Conservation Biology (EECB) Program, University of Hawaii at Manoa (USA)	1. Gaoué Orou G.	Completed
14	Beatrice Krauss Fellowship, University of Hawaii at Manoa (USA)	1. Gaoué Orou G.	Completed
15	East West Center Alumni - Hawaii Chapter (USA)	1. Gaoué Orou G.	Completed
16	Travel Grant from the IFS	1. Yorou NS 2. Assogbadjo AE	Completed
17	Travel Grant from the British Mycological Society	1. Yorou NS	Completed
18	Travel grant from the German Science Foundation	1. Yorou NS	Completed
19	Grant from the German Mycological Society	1. Yorou NS	On-going

Annex 18 : Prizes and nomination in 2007

N°	Title of prize / nomination	Nominee
1	Prize « Heinz and Johannes ». Best research paper on ecological measurements in Africa; 2007 edition. The Support Africa International Foundation, Koblenz, Germany, 2007.	Glèlè Kakaï Romain
2	IUCN SSC CWRSG, Regional Network Leader for Sub Saharan Africa (SSA) Region	Assogbadjo Achille E.
3	Award " Matsumae International Foundation Fellowship " for the Contribution to the research studies on "Silicon in Agriculture", 2006-2007 Edition. The support Matsumae International Foundation, Tokyo, Japan, 2006-2007.	Kindomihou Valentin

Annex 19: Visitors in 2007

N°	Full name of visitors	Provenance of the visitors	Responsible persons in LEA	Topics/Objects
1	NEVEU Patrick	France	Georges NOBIME	Cooperation Planète urgence - LEA
2	COLOMBO Laurent	France	Georges NOBIME	-
3	JAILLETTE Régis	France	Georges NOBIME	Cooperation Planète urgence - LEA
4	ULRIKE Sturm	Germany	Prof Brice SINSIN	Management of costal zone of Benin
5	SAWADOGO Ousmane	Burkina Faso	Prof P. Lalèyè	Fish and fishing in Benin
6	MORITZ Timo	Burkina Faso	Prof P. Lalèyè	Fish and fishing in Benin
7	LECHARTIER Benoît	Suisse	Hugues TCHIBOZO	-
8	BOUCHET Jean - Yves	France	Georges NOBIME	Photography in the LAHA, LOKOU forests And in the 'Ouémé valley in southern Benin
9	GOURIELLE Philippe	France	Georges NOBIME	Photography in the 'Ouémé valley in southern Benin (TOGBOTA)
10	BOUCHET Jean - Yves	France	-	-
11	STURM Ulrike	Germany	Prof Brice SINSIN	-
12	SCHNEIDER Sandra	Germany	-	-
13	STRURM Ulrike	Germany	Prof Brice SINSIN	Analysis of costal zone of Benin
14	SCHNEIDER Sandra	Germany	Prof Brice Sinsin	
15	Dr ADEKUNLE Victor	Nigeria	Prof Brice Sinsin	AFORNET project
16	JONATHAN Onyekwelu & Jana	Nigeria	Prof Brice Sinsin	AFORNET project
17	MATTHEW Banji Oyun	Nigeria	Prof Brice Sinsin	AFORNET project
18	SHADRACH Akindede	Nigeria	Prof Brice Sinsin	Afomet meeting on Biodiversity
19	COMBART Olivier	France	Georges NOBIME	Help for Ouémé Valley
20	THIOMSIANO Ahandi	Burkina Faso	Prof Brice Sinsin	Study on amphibian

N°	Full name of visitors	Provenance of the visitors	Responsible persons in LEA	Topics/Objects
21	MOHNEKE Meike	Germany	Prof Brice SINSIN	Study on amphibian
22	JAVA R.	Germany	Prof Brice Sinsin	Study on amphibian
23	ANNE Cheikh Amadou	Senegal	Prof Brice Sinsin	-
24	FILIPPI Laetitia	France	Georges NOBIME	Photothese building
25	Dr RÔDEL Mark - Olivier	Germany	Prof Brice SINSIN	Amphibian ecology/ BIOTA
26	PENNER Johannes	Germany	Prof Brice SINSIN	BIOTA
27	PENNER Johannes	Germany	Prof Brice SINSIN	BIOTA
28	LAURENSON Marline	France	Prof Brice SINSIN	Bureautique
29	DOREY Rodolphe	France	-	Study of red bellied monkey (planète urgence)
30	POULLOSSIER Marie Pierre	France	Georges NOBIME	Monitoring of the red bellied monkey
31	HIRSCHFIELD Mareike	Germany	-	Habitat use and reproduction behaviour of <i>Phynomans microps</i> in a west African savannas
32	WEILL Constance	France	Georges NOBIME	Study of red bellied monkey (Planète urgence)
33	PIRONNI laetitia	France	Georges NOBIME	Study of red bellied monkey (Planète urgence)
34	HAUBER Mélanie	Germany	Prof Lalèyè P.	Pisciculture
35	CEPERTEY Natalie	USA	Sinsin / Natta	Effect of sacred forests on riparian forests in Save region
36	BUCHMANN Christine	Germany	Prof Brice SINSIN	DADOBAT-Project
37	NOPPER & REIMAN	Germany	Prof Brice SINSIN	Study on amphibian
38	YAO Badoum, Maire de Matéri	Benin	-	-

N°	Full name of visitors	Provenance of the visitors	Responsible persons in LEA	Topics/Objects
39	ALASSANE A.	Togo	Prof Brice SINSIN	Study trip
40	KAMPMANN Dorothee	Germany	Valentin KINDOMIHOU	BIOTA Workshop administration
41	PALMANTIER Alice	Germany	Prof Brice SINSIN	Socio-economical analysis on cotton and biodiversité
42	KONE Moumamadou	Côte d'Ivoire	Prof Brice SINSIN	Impact of landuse intensification on the biodiversity of nats in the lam to region
43	DOSSO Kanvaly	Côte d'Ivoire	Prof Brice SINSIN	Diversity and spatial dynamics of termite populations in a west Africa savannas under fire regime
44	KONAN Djezou	Côte d'Ivoire	Prof Brice SINSIN	Evaluation of the impact of cacao culture an the vegetation and flora in the dense humid
45	KONE Ngolo Abdoulaye	Côte d'Ivoire	Prof Brice SINSIN	Ecology and socio-economic studies on Termites
46	KANGOYE Napoko Malika	Burkina Faso	Prof Brice SINSIN	Study on bats
47	LANOE Cecilia	France	Georges NOBIME	Humanitarian
48	LOMBART Olivier	France	Georges NOBIME	Humanitarian
49	Kirchmair Ivana	Germany	Prof Brice Sinsin	Vegetation of termite mound
50	Jurisch Katrin	Germany	Prof Brice Sinsin	Study in W- Park (vegetation, grazing)
51	LANOE Cecilia	France	Georges NOBIME	Humanitarian

(-) not specify.