



UNIVERSITY OF ABOMEY CALAVI, BENIN
FACULTY OF AGRONOMICAL SCIENCES
LABORATORY OF APPLIED ECOLOGY

**2009 SCIENTIFIC ACTIVITIES
REPORT**

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Foreword

Created by Professor Brice Sinsin in 1994, the Laboratory of Applied Ecology (LEA) of the Faculty of Agronomic Sciences (FSA) at the University of Abomey-Calavi (UAC-Benin) is one of the advanced research institutions on natural resources in West Africa. The LEA activities deal with capacity building through trainings, basic researches as well as applied researches for development. As it is, the LEA attracted since its creation over 50 PhD students and 80 MSc students. Scientific research at the LEA up to now has resulted in more than 300 scientific publications in peer-reviewed international scientific journals, books and conference proceedings. To date, the LEA has executed and been involved in various projects on sustainable management of natural resources, fodder and food tree species domestication in Africa, organic agriculture research and training, bioenergy development, etc. As such, the major achievements of the laboratory are the following: (i) Conservation and management of more than 10 forest genetic resources in Benin (e.g: *Adansonia digitata*; *Pentadesma butyraceae*; *Ceaesalpinia bonduc*; *Irvingia gabonensis*; *Tamarindus indica*; *Sclerocarya birrea*, etc.); (ii) Management of more than 10 traditional agroforestry systems involving medicinal plants in Northern Benin (e.g Community gardens of Papatia, Monts Kouffé, Dangbo, Porga, etc.); (iii) Ecological restoration of more than 5 degraded areas (E.g. Lama forest reserve in Southern Benin; Swampy forest of Lokoli in Southern Benin; Dry dense forest of Bassila and Wari Maro in Northern Benin; etc.); (iv) Involvement in the management action plan of at least 5 protected areas in Benin (Biosphere Reserves of Pendjari and W in Northern Benin; Forêt Classée des Trois Rivières in Northern Benin; Lama Forest reserve in Southern Benin; etc.); (v) Involvement in the process of publication of the Biodiversity atlas and the Red List of threatened plants and wildlife of Benin (IUCN Red Book of Benin: *in process*); (vi) Involvement in mapping of vegetation (Swampy Forest of Lokoli, Dense Forest of Lama; Biosphere Reserves of Pendjari and W; etc.) in Benin. Some future projects were also identified, which are: (i) Conservation and management of the swampy forest of Lokoli; (ii) Ecological databases establishment of Mont Kouffé Forest reserve; (iii) *Milicia excelsa*, *Khaya senegalensis* and *Azelia africana*, endangered tree species conservation in Benin; (iv) Conservation and domestication of edible forest trees of Benin; (v) Monitoring biodiversity in west African's region (vi) Conserving and domesticating threatened edible and medicinal plants and forest resources with too few on animal i.e. lions, elephants, antelopes, bats, primates; (vii) Collecting germplasm & starting with grafting programs of some agroforestry trees for the specific purposes; (viii) Developing specific organic agriculture curriculum for poverty reduction in West Africa; etc.

The LEA works closely in partnership with high education and research institutions at local and international levels, NGOs, local communities and decision makers at local, and regional levels.

Some facilities are available to support activities at the LEA, which are: Accommodation availability (medium standing) for foreign students (MSc & PhD) at Cotonou, Lokoli and in other different hinterland sites; Internet (ADSL) facilities for

local & foreign students/researchers; Small frizers (n = 2 units) for germplasm storage (seed banks); Literature review facilities/Library; Availability of technicians and researchers for fieldwork and data analyses.

The present report is the third edition after the one of 2007 and 2008 and summarizes the research activities which were performed at the laboratory in 2009. It is intended for several audiences of researchers in Benin and abroad, partners, 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 indices 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 eleven years (1998 – 2008) and the analysis of language of publications according to the types of publications at the laboratory. Section 3 provides a summary of conferences organized by the LEA in 2009 and those attended by researchers at the LEA. Section 4 describes the research projects and research grants obtained at the laboratory in 2009 whereas section 5 shows details about active human resources at the LEA as well as visitors who were in the laboratory in the framework of bilateral collaboration. Section 6 discusses the research activities performed at the laboratory in 2009 while section 7 shows the used references. Finally, the appendixes are presented in the section 8, 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 used methodology for the present report was mainly based on the research activities performed by researchers and students from the laboratory in 2009.

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 and technical reports are described. For each category of publication, the indices of specialization related to the scientific areas in which the works have been performed have been assessed accordingly. Also, for the published papers in peer-review journals, it is categorized, the articles with Impact Factor and those 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. Furthermore, collaborations and co-publications with scientists from developed and African countries have been detailed throughout the report.

The types of research are expressed respectively by the ratio between the number of publications produced individually or by co-publication with national, regional or international teams and the total number of publications in the laboratory.

Moreover, the trends of publications from 1998 to 2009 are 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 indices are calculated:

- *Specialization Index of publications* which is the ratio between the number of publications in a given discipline and the total number of publications when considering all disciplines;
- *Impact Factor (IF) Index of Publications* for a given field of publication which is the ratio between the number of publications having an Impact Factor and the total number of publications in peer review journals related to the considered field of publication;
- *Weighted Impact Factor Index of a given field of publication* which is the product of the Impact Factor Index of Publications and the arithmetic sum of impact factor indices 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 from the laboratory have participated), research projects, grants, prizes and awards are presented in the report.

To allow the assessment of the full references used to compute this report, a so called session “appendixes” has been inserted at the end of the report.

2. Types of research and publications at LEA in the year 2009

2.1 Type of research at LEA

The published articles by the researchers of the LEA are mostly produced in teams both national (45.6 %) and international (52.2 %). Very few number of research activities (2.2 %) were published within a regional team (figure 1). Furthermore, most of the high quality scientific articles published in the reviews with IF are co-published with international team (Figure 1).

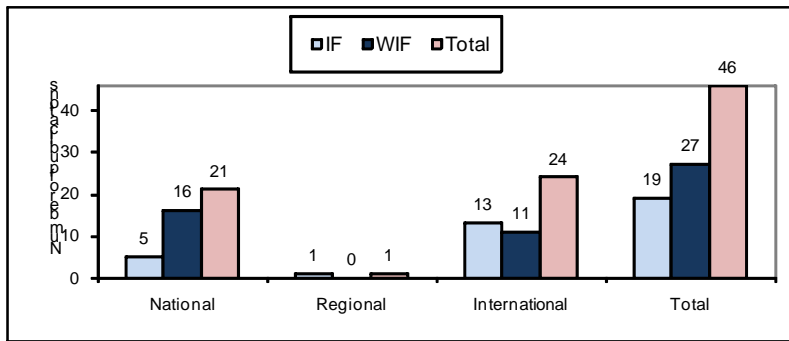


Figure 1: Spatial context of research activities in LEA in the year 2009

2.2 Type of publications at LEA in the year 2009

2.2.1 Theses at LEA

The number of enrolled students in agronomist and MSc degrees has globally decreased from 2007 to 2009 contrary to the number of defended PhD theses which has globally increased at the same time (figure 2). Moreover, 30 students are still doing their PhD research. Details about the research topics and candidates are shown in appendices 1, 2 and 3.

2.2.1.1 Ongoing PhD thesis at LEA in 2009

Four main fields of research were covered by the ongoing PhD theses in the LEA as follow: plant ecology and management (37 %); wildlife and protected areas management (36 %); agroforestry and non timber forest products (17 %) and landscape restoration (10 %) (figure 3). More and more, PhD students are interested by the field of wildlife and protected areas management as well as by plants ecology (figure 4). This can also be explained by the research projects in which they are involved in the laboratory, which are mainly focused on the above mentioned fields.

Half part of the students enrolled for their PhD programmes are almost at the end of their research works (3rd and 4th years: Fig 5). It is important to notice that the entire students who have defended their MSc theses will continue with their first year PhD research in 2010.

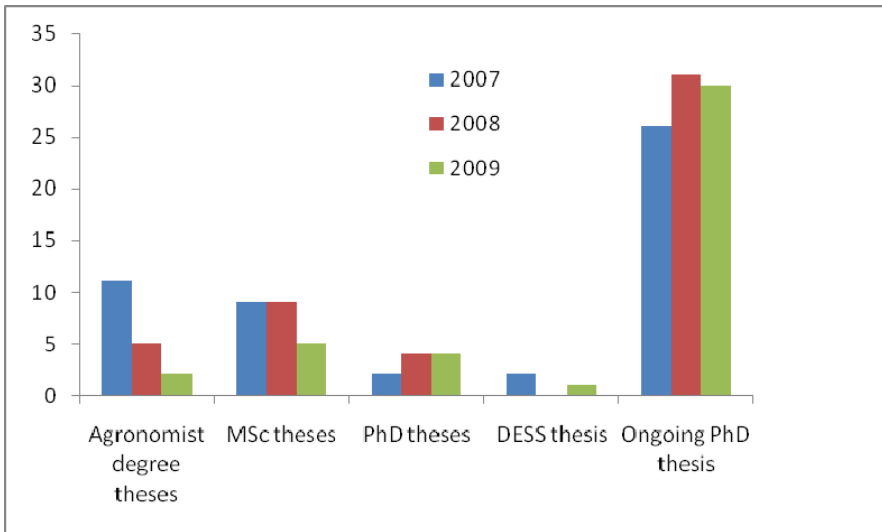


Figure 2: Trends of types of defended and ongoing PhD Theses from 2007 to 2008

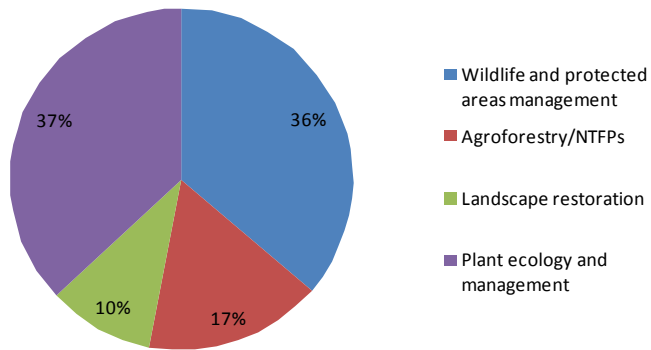


Figure 3: Spectrum of ongoing PhD thesis and related field of research in 2009

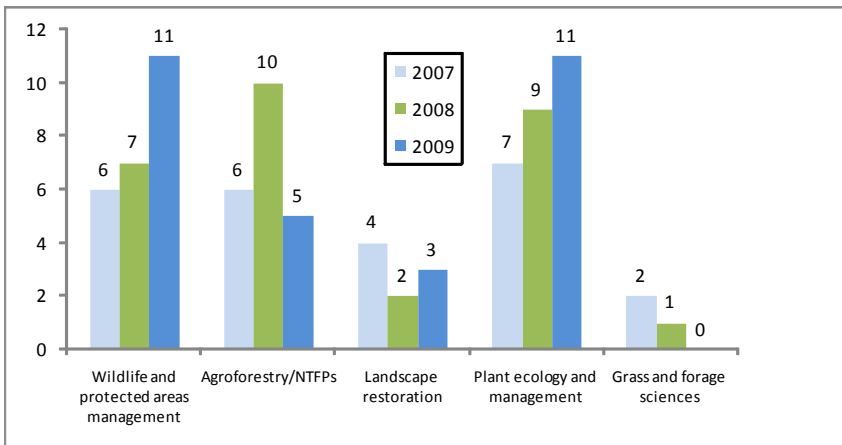


Figure 4: Trends of ongoing PhD thesis according to the fields of research from 2007 to 2009

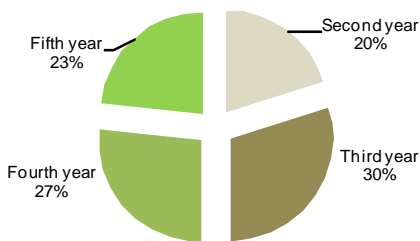


Figure 5: Typology of PhD students in LEA based on the number of year related to their research activities

2.2.1.2 MSc and MBa theses at LEA in 2009

Six (6) MSc and two (2) MBa theses were defended in LEA in 2009 (figure 6) and have targeted various fields of research such agroforestry (40 %), forest and plants ecology (40 %) and, wildlife management (20 %) (Figure 6).

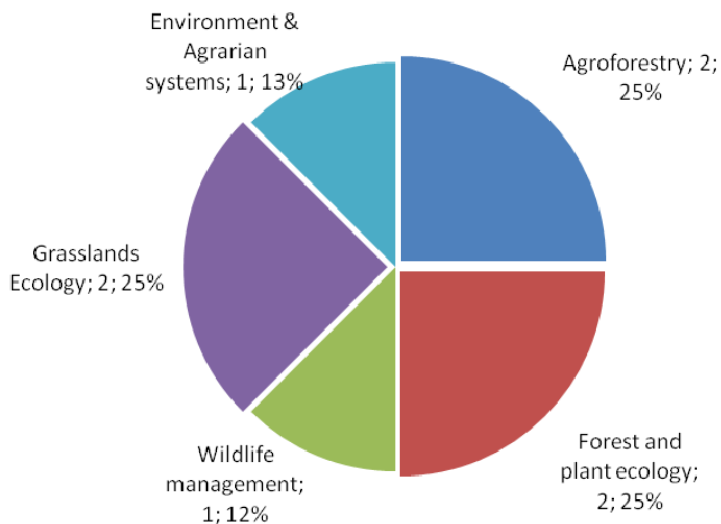


Figure 6: Spectrum of MSc and MBa theses and related fields of research in 2009

2.2.1.3 Agronomist degree theses

Four (4) Agronomist degree theses have been defended in the LEA in 2009. The main topics are related to grasslands ecology (40 %), forest ecology (20 %), forage and grass sciences (20 %) and agroforestry (20 %). (Figure. 7).

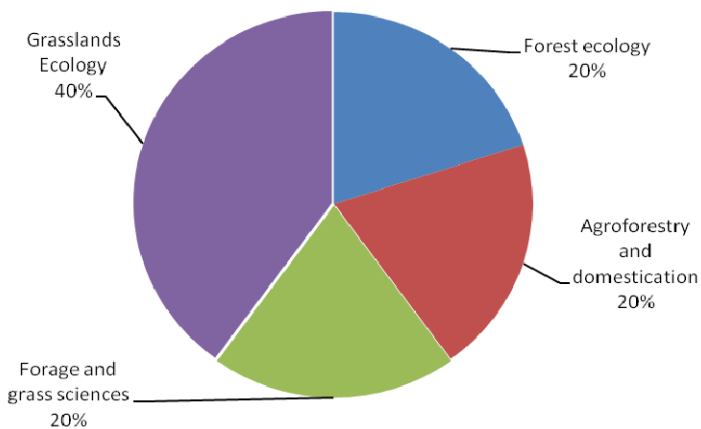


Figure 7: Spectrum of Agronomist degree thesis and related fields of research in 2009

2.2.2 Scientific productions at LEA in 2009

The scientific research at LEA have yielded in 68 scientific publications in peer-reviewed journals in 2009 as follow: published: 46; in press: 9; under review: 13, 10 articles in proceedings, 17 abstracts in the books of abstracts and 1 extension book.

2.2.2.1 Publications in peer review journals

(i) Number, categories and impact factor indexes of publications

In 2009, the published articles are mostly in the peer review journals without IF (59 %) compared to the number of published papers in the reviews having an Impact Factor (41 %) (Figure 8). However, the gap between the number (23) of the published/submitted articles in the journals having Impact Factor in 2009 compared to ones without Impact Factor (32) is less important than what was observed the previous years (see Figure 14a). However, the observed trends for the articles under review (Figure 8) can lead to the reverse tendency in the following years. Therefore, we can confirm that more and more researchers of the LEA improve their scientific capacities in publishing their research findings in the peer review journals having an IF. Full references (authors, journals, etc.) of those publications are shown in appendices 5, 6, 7, 8, 9 and 10.

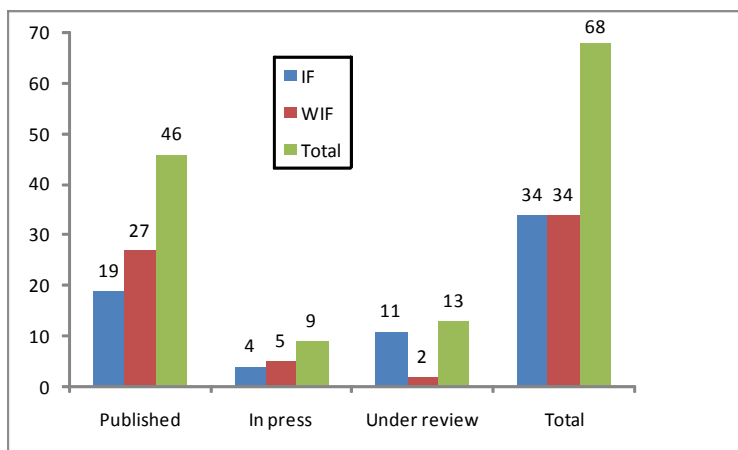


Figure 8: Spectrum of scientific productions of LEA in 2009

(ii) Specialization Indexes of publications

a. Published articles

In 2009, the published articles cover as the previous years various fields of research such as economic botany (23 %), plant and forest ecology (17 %), ethnobiology (17 %), plants sciences (11 %), molecular biology (8 %), biometry (8 %) and the remaining fields such as social science, wildlife management, rangeland management,

taxonomy, agroforestry, climate change, ethnobotany, phytosociology cover 2 % each, respectively (Figure 9).

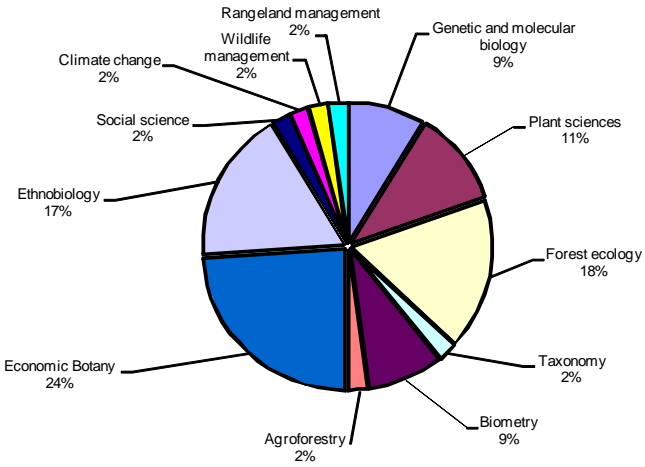


Figure 9: Published articles according to the fields of research in 2009

b. Articles in press

Like the published articles in 2009, the ones *in press* also cover various fields such as plant sciences (23 %) while the remaining such as social sciences, development economy, plant ecophysiology, wildlife management, ethnobiology, conservation genetics cover each 11 %, respectively. (Figure 10).

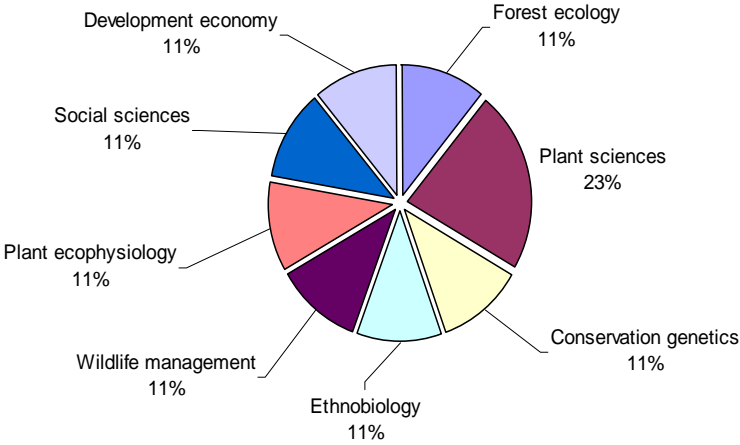


Figure 10: Articles in press according to the fields of research in 2009

c. Articles under review

The articles still under review cover also various fields of disciplines such as economic botany (30 %), plants ecology and biodiversity conservation (23 % each) and the remaining such as grass and forage science, ethnobiology and molecular biology cover each 8 % , respectively (Figure 11).

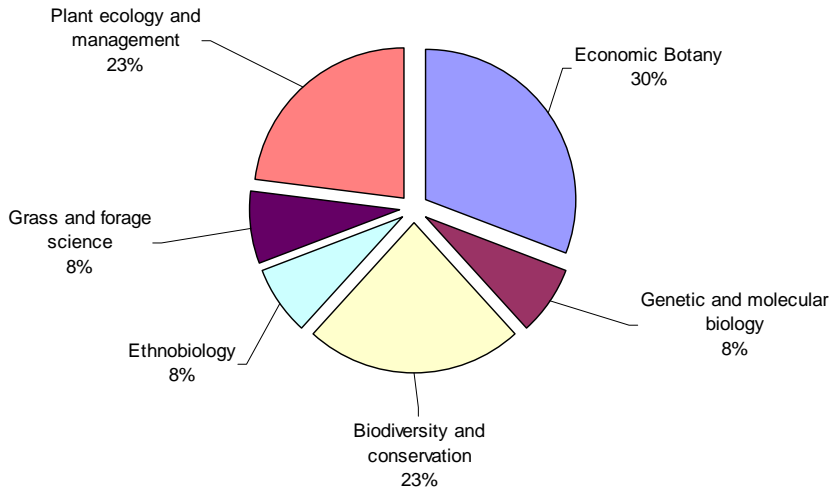


Figure 11: Articles under review according to the fields of research in 2009

(iii) Weighted Impact Factor Index of publications

Publications which have highly contributed to gain the Impact Factor of the laboratory in 2009 were related to plant sciences and economic botany (table 1). Therefore, these fields of publication are the ones in which the recorded scientific publications in LEA had the highest Impact Factor in 2009.

Table 1: Weighted Impact Factor Indices of publications according to the disciplines of specialization

| Field of publication | <i>Total number of publications related to the field in peer review journal</i> | <i>Total number of publications related to the field in the reviews having an impact factor</i> | Weighted Impact Factor indices |
|--------------------------------------|---|---|--|
| Genetic and molecular biology | 4 | 2 | 1.691 (0.741; 2.642) |
| Plant sciences | 4 | 3 | 5.778 (1.113; 2.032; 4,560) |
| Forest ecology | 8 | 2 | 0.563 (0.145; 2.110) |
| Zoology and Taxonomy | 1 | 1 | 0.740 (0.740) |
| Biometry | 3 | 1 | 0.117 (0.353) |
| Agroforestry | 1 | 1 | 0.845 (0.845) |
| Economic Botany | 11 | 5 | 2.323 (2.110; 1.180; 0.845;0.621;0.356) |
| Ethnobiology | 7 | 3 | 0.379 (0.145; 0.400; 0.340) |
| Social science | 1 | 1 | 0.220 (0.220) |

(): The numbers in bracket are the Impact Factor (IF) recorded respectively for each article having an IF in a given field of publication

(iv) Indices of co-publications in peer review journals

a. Country level

The LEA works closely with a wide partnership of local and foreign training and research institutions at local, regional and continental levels. As it is, its researchers used to publish their research outputs in collaboration with scientists abroad and locally (figure 12). At a country level, most of the publications was written with researchers from Benin (46 %), Belgium (20 %), Germany (17 %), The Netherlands (9 %) while the remaining were published together with scientists from France (4 %), USA (2 %) and Togo (2 %).

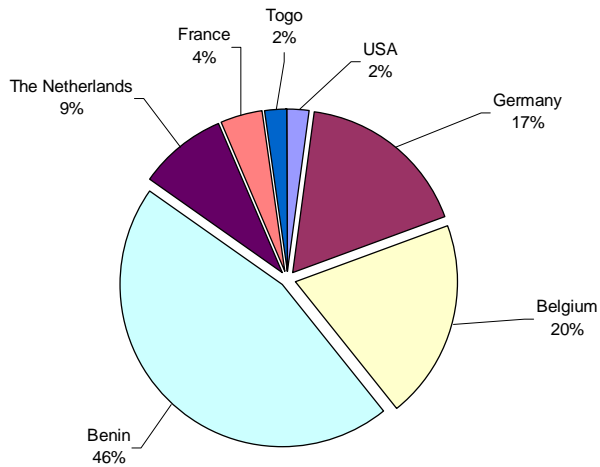


Figure 12: Diversity in indices of the LEA co-publications in peer review journals at countries scale in 2009

b. Continental level

At a continental scale, the most important articles have been co-published in 2009 with European scientists (50 %) followed by Africans (48 %) and North-American (2 %) (Figure 13).

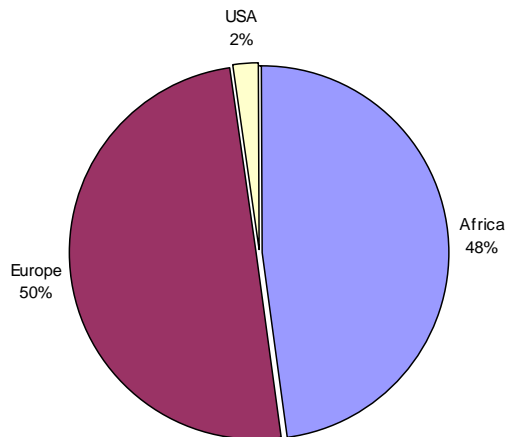


Figure 13: Diversity in indices of the LEA co-publications in peer review journals at continental level in 2009

2.2.2.2 Proceedings: number of publications and indices of specialization

Fourteen (14) articles were published in the proceedings of scientific conferences in 2009. Most of these publications cover various fields (Figure 14) such as ethnobiology (50 %), biodiversity and conservation (20 %), biometry, parasitology and economic botany (10 %, each). The full references of these publications are shown in appendix 11.

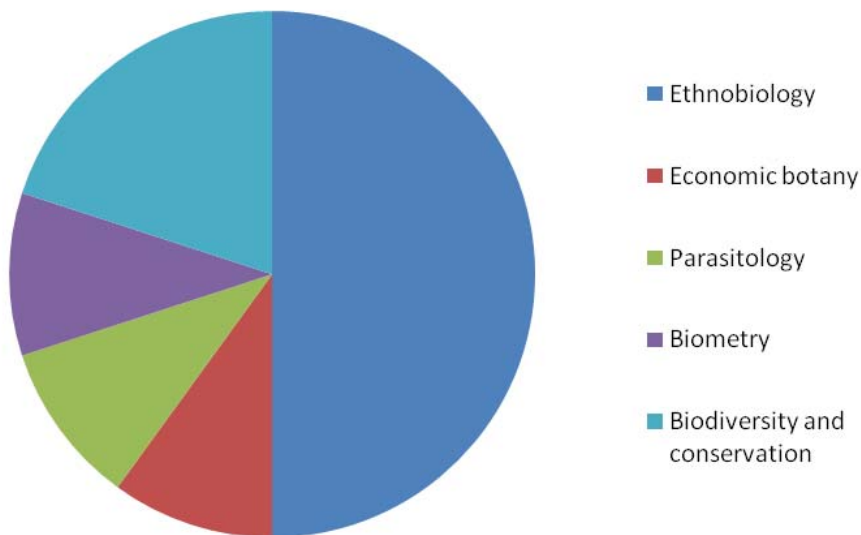


Figure 14: Number of publications and indices (%) of specialization in Proceedings in 2009

2.2.2.3 Trends of publications in peer review journals and proceedings from 1998 to 2009

Publications in peer review journals have globally increased from 1998 to 2009 with the highest peak in 2009. Publishing in peer review journals having an Impact Factor has started in the laboratory in 1994 with 1 to 3 publications per year till 2005. 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 (figures 15a; 15b). In 2009, the number of published scientific articles has considerably increased (46 publications in peer reviewed journals) compared to the previous years (Figure 15a). Better, the number of published articles in journals with Impact Factor has considerably increased since 2008 in the laboratory.

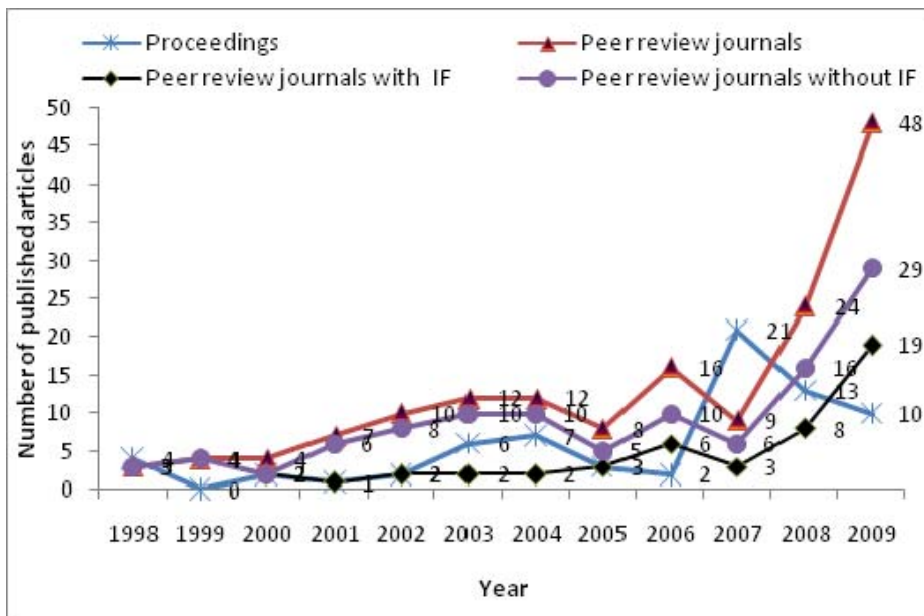


Figure 15a: Trends per types of publications from 1998 to 2009

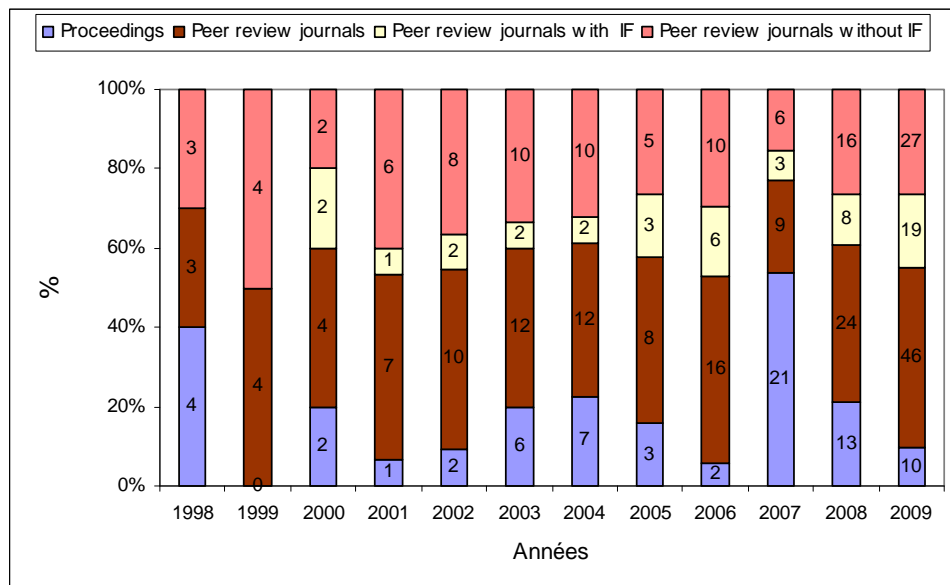


Figure 15b: Spectra of type of publications from 1998 to 2009: percentages of reviews

2.2.2.4 French/English ratio according to the types of publications

More and more, the PhD, MSc theses are written in English while the agronomist degree thesis in LEA is in French as this is the official language in Benin. However, most of the published articles in peer reviewed journals as well as proceedings were published in English in 2009 (Figure 16). All the published papers in the journals having an IF are written in English meaning that less and less Impact Factor journals accept papers in French.

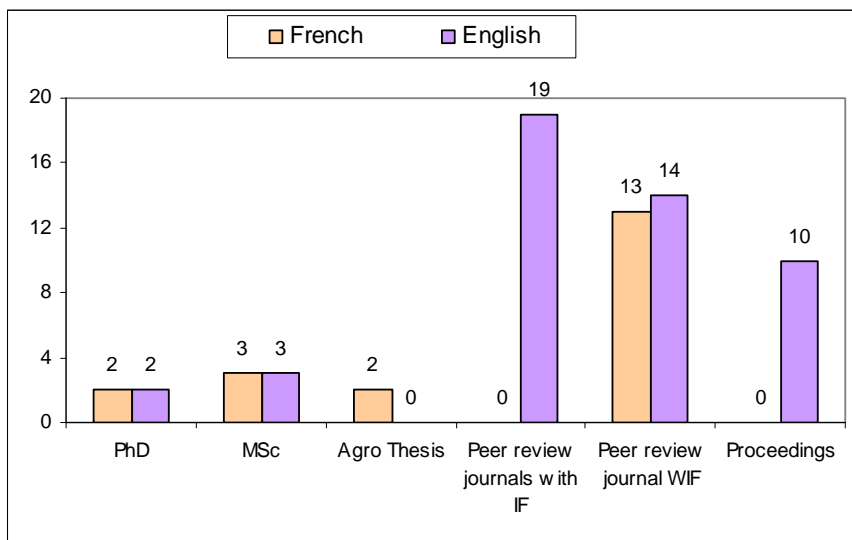


Figure 16: French/English ratio for various types of publications in LEA

2.2.2.5: Abstracts: number of publications and indexes of specialization

Seventeen (17) abstracts were published in books of abstracts of scientific conferences in 2009. These abstracts targeted various disciplines as described on the figure 17. Economic Botany showed the highest index of publications (27 %) while each of the following fields i.e. conservation genetics, ecological restorations and forest ecology, the lowest (6 %). Full references of these publications are shown in appendix 12.

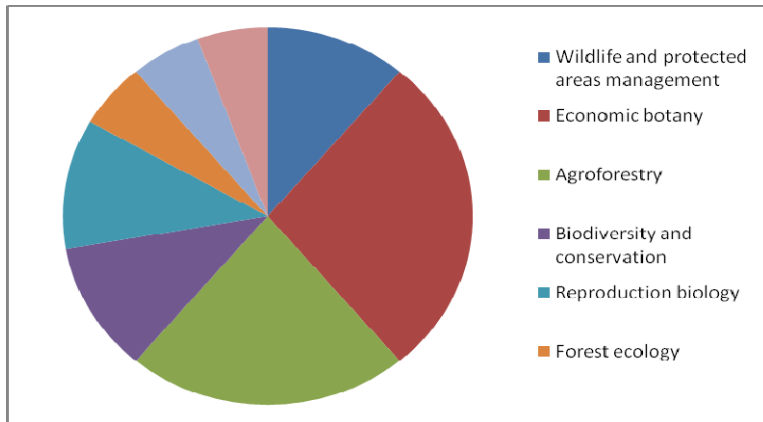


Figure 17: Indices of publications specialization in the books of abstracts in 2009

3. Conferences and workshops in 2009

3.1 Conferences organized by LEA

Compared to 2007 and 2008, there is no change in the number and type of conferences which are usually organized by the LEA. These are (i) Benin rangelands conferences and (ii) the Workshop on Protected areas. Among the scientific meetings, only PhD progress reports were recorded, defended and evaluated by various boards in 2009 as it was also the case in 2008.

3.2 Participation to international conferences by the researchers from LEA in 2009

In 2009, researchers of the LEA have participated in 27 conferences. 76 % of these conferences were held in Africa (Benin, Gabon, Mali, Senegal, Ethiopia, Niger, Ghana, Burkina Faso, Kenya and, South Africa), 20 % in Europe (United Kingdom, Germany, France, and Belgium) (Figure 18). Details related to these conferences/workshops were listed in appendix 14.

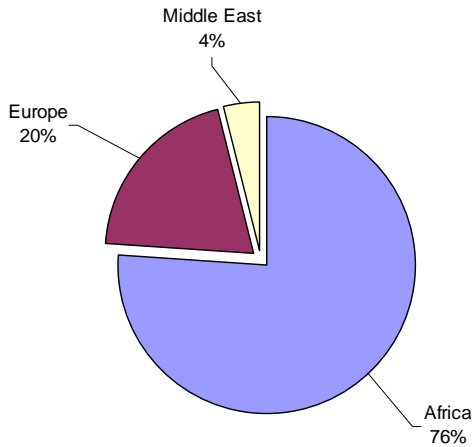


Figure 18: Level of participation of LEA's researchers to international conferences in 2009

4. Research projects, research grants and prize at the LEA in 2009

The research activities in the LEA were mainly financed since 2006 by European Union (DADOBAT-UE, SUN-UE: 25 %), international co-operation projects (BIOTA: 13 %), and international foundations and institutions (small research grants: 62 %) (Figure 19). The following projects have recently started, i.e. WANOART-EU, LOEWE and PROJECT C2, with the only one WANOART which has no PhD students. Most of the PhD and MSc students as well as senior scientists in the LEA are involved in these projects for their research activities. Details (objectives, beneficiaries, etc.) on these projects and grants are shown in appendixes 15 and 16. Moreover, two international recognitions have been awarded to the researchers from the LEA in 2009 (appendix 17).

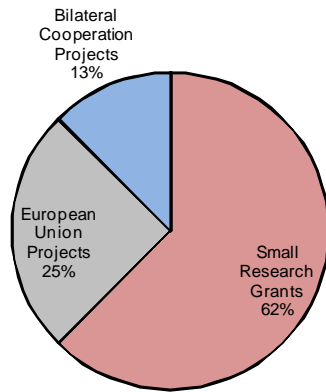


Figure 19: Spectrum of research funding in 2009

5. Human resources and visiting research in the LEA in 2009

Human resources in the LEA in 2009 are about 20 main investigators and senior scientists, 30 PhD students, 5 MSc and 5 agronomist degree students actively participating to research activities within the laboratory. Moreover, 5 technicians and 3 drivers are use on permanent basis for the fieldworks. Specifically, the LEA houses in 2009, one Professor (Professeur Titulaire CAMES), 4 associate Professors (Maitre-Assistants/CAMES), 6 assistant professors (Assistants), and several junior researchers (PhD, MSc, MBa, Agricultural Engineer and bachelor students). Details about these human resources are shown on the web site of LEA (www.leabenin-fsauac.net).

Furthermore, in 2009, the LEA has welcomed 37 researchers as visitors against 63 in 2008 and 51 in 2007, with 57 % of them from Europe (Germany, Switzerland, France, Belgium) and 43 % from Africa (Benin, Nigeria, Sierra Leone, Burkina Faso) (figures 19 & 20).

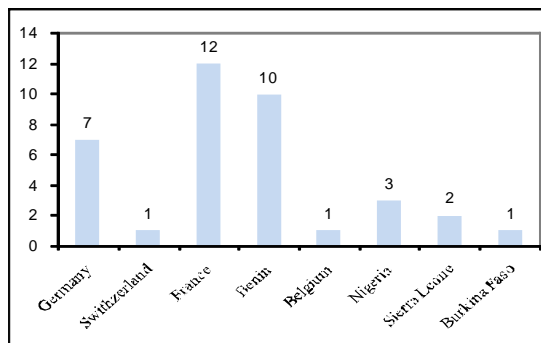


Figure 20: Visiting researchers welcomed in the LEA in 2009 at country

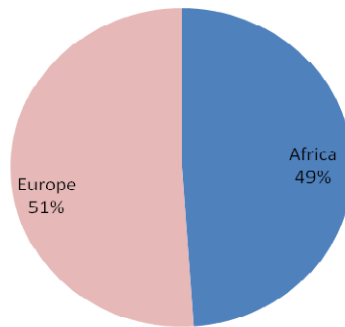


Figure 21: Visiting researchers welcomed in the LEA in 2009 at continental level

6. General discussion and conclusion

Like the previous years, various types of publications were produced by researchers at the LEA in 2009. They range from theses to publications in peer review journals and proceedings. Publications in peer review journals have globally increased from 1998 to 2009 with the highest peak in 2009 (46 articles in peer review journals). Better, the number of published articles in the journals with Impact Factor has considerably increased since 2008 in this laboratory. As it is, the trends whatever the category of papers (published and *in press*) from 2007 to 2009 is positive. This means that researchers are improving in publishing more and more their outputs in peer review journals. This can be explained at one hand by the increased number of PhD students in the laboratory who should publish their outputs in a peer review journal before defending their thesis according to the regulation of the Faculty of Agronomic Sciences of the University of Abomey Calavi. In other hand, the number of senior scientists in the LEA increases every year. The latter should enrol for the aptitude list of CAMES (*Conseil Africain et Malgache pour l'Enseignement Supérieur*) before getting promotion at a scientific level. This implies they published scientific articles at least in peer review journals. As such, the scientific capacity of the LEA increases more and more as it can be observed throughout the number of publications in peer review journals. In 2009, the publications cover as the previous years various fields of research such as economic botany (25 %), plant and forest ecology (17 %), ethnobiology (17 %), plants sciences (11 %), molecular biology (9 %), biometry (9 %) and the remaining fields such as social science, wildlife management, rangeland management, taxonomy, agroforestry, climate change covering 2 % each, respectively. From that, the latter disciplines appeared to receive a relative low attention with decreasing number of publications. In fact, the level of the LEA interest for these fields depends on partners and fund availability. Consistent attentions for these apparent minor fields require the availability of national research funds and grants from local donors, Government and NGOs. Attention has mainly increased for the fields such as economic botany, ethnobiology, biometry, plant sciences and molecular biology. This reflects the LEA's dynamic in disciplinary research activities. However,

from the 48 published articles in 2009, the most important ones which have highly contributed to the Impact Factor of the laboratory were related to plant sciences and economic botany. The remaining fields of publications had less impact and this can be explained by the fact that more papers which were published have no Impact Factor or most of them have been published in the journal with low Impact Factor. This gap should be filled for conserving the multidisciplinary characters required for applied researches in the context of the LEA. As it is, import to improve on regular basis strategies for publishing in leading peer review journals.

The research activities in the LEA were mainly financed through European Union, international co-operation projects and small research grants provided by the international foundations. Almost all these financial sources have focused on plants ecology, landscape management and restoration, wildlife and protected areas management and agroforestry and useful trees domestication. Consequently, most of the ongoing PhD and MSc topics targeted these above mentioned fields of research.

The LEA works closely with a wide spectrum of research institutions and universities over the world. As such, its researchers used to publish their research outputs in collaboration with scientists abroad and locally. Most of articles were published within international teams. At a continental level, the most important publications have been co-published with scientists from Europe (50 %) following by those from Africa (48 %) and America (2 %). Almost no scientific works was done with the scientists from other continents such as Latino America, Asia, Australia, Middle East and even Northern Africa. This suggests the need of more and sustainable efforts for building cooperative research networks basically using interactive research topics and funds from further international policies.

Moreover, almost no scientific papers have been published with scientists at a regional level as it was also the case in 2007 and slightly in 2008. As such, regional scientific collaborations should be developed for the following years since Benin shares 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. Recent case is that of the West African network for organic agriculture Research and Training financed by the EU, which offers a frame for a strong regional collaborative scientific work bringing together Benin, Nigeria, Sierra Leone, Ghana and UK.

Due to the lack of some equipments (e.g for DNA fingerprinting; apparatus to assess data in ecophysiology) for the LEA, the latter used to collaborate with laboratories abroad in developed countries (Belgium, Germany, and The Netherlands). Since Applied genetics is new and promising fields from the point of view of the needs for southern countries such as Benin, more attention are needed from national government to provide with more adequate and relevant equipments for laboratory works.

A comparative analysis of published, in press and under reviews articles' statistics showed that the grass and forage field appeared to be of low production as it was also the case in 2008. This low scientific production probably results from decreasing and

lower funding opportunities for researchers in this field. This result suggests the need of competitive funds to support research activities in this field.

Based on the findings from the present report, it is recommended that the LEA:

- (1) help for the capacity building of its researchers in order to be able to publish more scientific paper in leading peer review journals having a high IF;
- (2) develop more and more a regional team in order to allow its research activities at sub regional level;
- (3) focus its research activities more and more on new and promising field such as molecular biology and ecophysiology in the current context of global change and conservation of biodiversity;
- (4) develop more curricula in the fields of applied ecology for regional training purposes;
- (5) continue monitoring biodiversity at continental level;
- (2) develop the conservation and domestication strategies for some edible and medicinal forest and savannahs 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;
- (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.

7. References

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- www.fsa.bj.refer.org
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- Publications in LEA in 2008-2009 (cf. appendices)
- Proceedings in LEA in 2008-2009 (cf. appendices)
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- Assogbadjo A.E; Kindomihou V., Glele Kakaï R., Gbohayida S & Sinsin B. (2009). 2008 scientific report of Laboratory of Applied Ecology (LEA). 26 pages + appendixes. ISBN 978-99919-305-0-5.

8. APPENDIXES

Appendix 1: Ongoing PhD thesis until 2009

| N° | Student full name | Level | Research topics | Fields of Research |
|----|-----------------------------|----------------------|--|---|
| 1 | AZIZOU EL-HADJ Issa | 5 th year | Facteurs déterminants de cogestion pour la conservation des ressources naturelles de la réserve de biosphère transfrontalière du W/Bénin. | Wildlife /protected areas management |
| 2 | NOBIME Georges | 4 th year | Les facteurs écologiques et éthologiques déterminants pour la conservation du cercopithèque à ventre rouge <i>Cercopithecus e. erythrogaster</i> au Bénin. | |
| 3 | MOROU Boubé | 5 th year | 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. | |
| 4 | NAGO Sédjro Gilles Armel | 4 th year | Savannah amphibians along a disturbance gradient. | |
| 5 | VODOUHÈ Fifanou | 4 th year | Non-Timber Forest Products uses and biodiversity conservation in Pendjari Biosphere Reserve. | |
| 6 | SOGBOHOSSOU Etotépé A. | 3 rd year | Ecology, ethology, morphology and phylogenetics of lions (<i>Panthera leo</i> Linnaeus 1758) in Pendjari National Park, Northern Benin. | |
| 7 | DJEGO - DJOSSOU G. Sylvie | 4 th year | Aires d'occurrence et comportements socio-écologiques du colobe de Geoffroy (<i>Colobus vellerosus</i>) et du colobe de Van Beneden (<i>Colobus verus</i>) au Bénin | |
| 8 | TOUDONOU A. S. Christian | 3 rd year | Utilisation and conservation of snakes: case study from ball python (<i>Python regius</i>) in Benin. | |
| 9 | KPERA Nathalie | 2 nd year | Interaction between crocodiles sustainable utilization and their conservation in Benin. | |
| 10 | MAMA Djaouga | 4 th year | 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. | |
| 11 | HOUSSOU Laurent | 3 rd year | Indicators of sustainability at landscape, habitat and species scale for providing a decision support tool for politician and management workers. | |
| 12 | MALIKI Rafiou | 3 rd year | Evaluation de la durabilité écologique et socio-économique des systèmes de cultures sédentarisés à base d'igname : Développement des modèles bio-économiques. | Agroforestry/Non Timber Forest Products |
| 13 | FANDOHAN A. Belarmain | 3 rd year | Ecology, genetic diversity and ethnobotany of tamarind (<i>Tamarindus indica</i> L.) in Benin | |
| 14 | EDON A.T. Solange | 3 rd year | Biologie de reproduction et Productivité du Baobab au Bénin. | |
| 15 | BONOU Alice | 3 rd year | Economic assessment of Non Timber Forest Products (NTFP) in Sampéto, a surrounding village of the W National Park in Banikoara district (research stopped since 2 years). | Landscape restoration |
| 16 | DELEKE KOKO Kafui Inès Edna | 3 rd year | Ethnobotany and chemical study of galactogenic plants uses in traditional medicine in Pendjari Biosphere Reserve. | |

| N° | Student full name | Level | Research topics | Fields of Research |
|----|-------------------------|----------------------|--|--|
| 17 | AVAKOUDJO Julien | 3 rd year | Assessment of soil degradation: Process and resilience as mastered by aridity factors and land use practices inside and around the W National Park (Benin). | |
| 18 | DJOGBÉNOU Paul | 5 th year | 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. | |
| 19 | DJODJOUWIN Laurent | 5 th year | Dynamique de croissance des espèces introduites en plantations d'enrichissement dans le sud et le centre Bénin. | |
| 20 | AGONYISSA Didier | 5 th year | 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 | AGBANI Onodjè Pierre | 5 th year | Etat de conservation et viabilité des populations de quelques espèces ligneuses soudaniennes menacées du Bénin. | |
| 22 | AVOCEVOU Carole | 4 th year | 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. | |
| 23 | HESSOU Comlan | 4 th year | Ecologie de <i>Caesalpinia Bonduc</i> au Bénin | |
| 24 | HOUEHANOU Thierry | 3 rd year | Gap analysis: Viability of threatened plant populations (<i>Azelia africana</i> Smith ex Pers., <i>Pterocarpus erinaceus</i> Poir., <i>Khaya senegalensis</i> Desr A. Juss; <i>Millicia excelsa</i> Welw. C. C. Berg) and assessment impacts of Loranthaceae parasite on <i>Vitellaria paradoxa</i> in Pendjari Biosphere Reserve and in land use area. | Plant ecology and management |
| 25 | SINSIN C. A. Franck | 2 nd year | Tree Ring Analysis; Population Structure and Sustainable Forest Management: Investigation of Selected Tropical Tree Species in Three Phytogeographical Regions of Benin | |
| 26 | ASSEDE Eméline Sessi P. | 3 rd year | Ecology of plant community in Biosphere Reserve of Pendjari. | |
| 27 | KOWIYOU Yessoufou | 2 nd year | Community phylogenetics of south African flora: case study of Kruger National Park, South Africa. | |
| 28 | GOUWAKINNOU N. Gérard | 3 rd year | Population structure and ethnobotanical uses of <i>Sclerocarya birrea</i> (A.Rich) Hochst in Karimama district (Benin). | |
| 29 | ZOFFOUN Alex | 4 th year | Etude de la diversité des communautés végétales envahissantes des cultures fourragères et de la dynamique de tallage des graminées vivaces des pâturages artificiels au Bénin. | |
| 30 | HOUNDANTODE Justin | 4 th year | Problématique de gestion et valorisation des eaux usées du Bénin en cultures maraîchères : cas de l'amarante dans la commune de Sème Kpodji | Horticulture & Environmental management |

Appendix 2: Completed agronomist engineer degree thesis during the year 2009

| N° | Student full name | Research topics | Fields of Research |
|----|-------------------------------|---|------------------------------|
| 1 | AGBLA Salomon | Modélisation des effets de compétition entre arbres et de la structure des zones dégradées de la forêt classée de la Lama enrichies en <i>Azvelia africana</i> Sm, <i>Khaya grandifoliola</i> Welw C.D.C et <i>Khaya senegalensis</i> Desr. | Forest Ecology |
| 2 | PADONOU Elie | Evaluation écophénotypique et domestication de <i>Jatropha curcas</i> au Bénin | Agroforestry & domestication |
| 3 | LESSE Dodji Paolo A. Armel | Transhumance et Changement climatique : Productivité et capacité de charge des pâturages naturels des communes riveraines de la Réserve de Biosphère Transfrontalière du W (Bénin) | Grasslands Ecology |
| 4 | AHOUDJI Yédia Myrèse Carmelle | Transhumance et changement climatique : caractérisation des populations des principaux ligneux fourragers des terroirs riverains de la Réserve de Biosphère Transfrontalière du W (Bénin) | Grasslands Ecology |

Appendix 3: Completed MSc (DEA) thesis in the year 2009

| N° | Student full name | Research topics | Fields of Research |
|----|--------------------------------------|---|----------------------------------|
| 1 | SARE Baké Adissatou | Variability of the agroforestry systems around the protected areas in Benin. | Agroforestry |
| 2. | AKPONA Jean Didier | Caractérisation morphologique et production des parcs à karité (<i>Vitellaria paradoxa</i> C.F. Gaertn) au Bénin | |
| 3. | AZIHOU Akomian Fortuné | Ecological factors associated to the spatial isolation of individual tree of the gregarious species <i>Isobertlinia doka</i> Craib and Stapf in Benin | Forest and plant ecology |
| 4. | SINSIN C. A. Franck | Using Tree Ring Analysis to Study the Growth Performance from Saplings to Wood of Five Tropical Species | |
| 5. | DJAGOUN Chabi Adéyèmi Marc Sylvestre | Large and small browser bovid species habitat use in a seasonal sudanian ecosystem: a case study of Bushbuck (<i>Tragelaphus scriptus</i>) and Red-flaked-duiker (<i>Cephalophus rufilatus</i>) in Pendjari Biosphere Reserve (Northern Benin). | Wildlife management |
| 6 | KOMBIENOU Pacom Dane | Dynamique des systèmes d'exploitations agricoles sur la chaîne de l'Atacora : analyse des pratiques culturelles et des stratégies de conservation des sols dans le terroir de Boukoumbe | Environment and agrarian systems |
| 7 | AHOUANGAN | Contribution à la gestion durable des parcours naturels : Impact des feux tardifs et de contre-saison | Grasslands Ecology |

| N° | Student full name | Research topics | Fields of Research |
|----|------------------------------|---|---------------------------|
| | <i>Mahutin Bernice Doris</i> | sur la productivité et la composition floristique des pâturages naturels des savanes soudaniennes de la ferme de Dassari au Bénin | |
| 8 | ZEKPETE I.S Eliane | Transhumance et changement climatique : Utilisation des outils d'aide à la décision dans la gestion durable des ressources des écosystèmes agropastoraux soudano-sahéliens du Bénin | <i>Grasslands Ecology</i> |

Appendix 4: Completed PhD thesis in the year 2009

| N° | Student full name | Diploma | Research topics | Institution/Specialisation |
|----|-------------------|-----------------|--|---|
| 1. | EKUÉ Marius R.M. | Ph.D | Indigenous knowledge, morphological variation and genetic diversity of <i>Blighia sapida</i> K.D. Koenig in Benin | Georg-August University of Göttingen / Forest Genetics and Forest Tree Breeding Institute, Germany |
| 2. | HOUEHOUNHA Rémy | Doctorat Unique | Analyse des impacts écologiques et socioculturels de l'exploitation des produits de <i>Daniellia oliveri</i> (Rolfe) Hutch. & Dalz. sur la viabilité de ses peuplements au Bénin | Faculté des Lettres, Arts et Sciences Humaines, Université d'Abomey-Calavi, Benin |
| 3. | TEKA Oscar | PhD | " Development of a method for analyzing space relevant processes in developing countries: the case of the coastal area of Benin" | Karlsruhe Institute of Technology (KIT), Germany |
| 4. | DAN Céline | PhD | Etude écologique, floristique, phytosociologique et ethnobotanique de la forêt marécageuse de Lokoli (Zogbodomey-Bénin). | Université Libre de Bruxelles, Phytosociologie, Botanique Systématique, Biodiversity and conservation |

Appendix 5: Articles published in peer-review journal with IF in the year 2009

| Disciplines | N° | Authors' Name | Title | Journals | Impact Factor |
|--------------------------------------|----|--|--|--|---------------|
| Genetic and molecular biology | 1 | Ekué M.R.M., Gailing, O. and Finkeldey, R., 2009. | Transferability of Simple Sequence Repeat (SSR) Markers Developed in <i>Litchi chinensis</i> to <i>Blighia sapida</i> (Sapindaceae). | <i>Plant Molecular Biology Reporter</i> 27, 570-574. | 0.741 |
| | 2 | Kyndt, T., Assogbadjo A.E., Hardy, O.J., Glèlè Kakaï R., Sinsin B., Van Damme P., Gheysen G. | Spatial genetic structuring of baobab (<i>Adansonia digitata</i> L., Malvaceae) in the traditional agroforestry systems of West Africa. | <i>American Journal of Botany</i> , 96(5): 950-957. | 2.642 |
| Plant sciences | 3 | Glèlè Kakaï R., Sinsin B. | Structural description of two <i>Isoberlinia</i> dominated communities in the Wari-Marô forest reserve (Benin) | <i>South African Journal of Botany</i> . 75(1): 43-51. | 1.113 |
| | 4 | Rodenburg J., Saito K., Glèlè Kakaï R., Touré A. D., Mariko M., Kiepe P. | Weed competitiveness of the lowland rice varieties of NERICA in a Guinea Savanna environment. | <i>Field Crop Research</i> , 114:411-418 | 2.032 |
| | 5 | Delvaux C., Sinsin B., Darchambeau F. & Van Damme P. | Recovery from bark harvesting of 12 medicinal tree species in Benin, West Africa. | <i>Journal of Applied Ecology</i> , 46 : 703-712 | 4.560 |
| Forest ecology | 6 | Adomou A.C., Akoegninou A., Sinsin B., De Foucault B. & Van Der Maesen L.G.J. | Semi-deciduous forest remnants in Benin: patterns and floristic characterization. | <i>Acta Bot. Gallica</i> , 156 (2): 159-171. | 0.145 |
| | 7 | Bonou, W. Glèlè Kakaï R., Assogbadjo A. E., Fonton H.N., Sinsin B. | Habitat Characterization of <i>Azelia africana</i> Sm. In the Lama forest reserve (Bénin). | <i>Forest ecology and management</i> . 258: 1084-1092 | 2.110 |
| Zoology and Taxonomy | 8 | Nago S.G.A., Sinsin B. & Rödel M-O. (2009) | The tadpole of <i>Ptychadena schillukorum</i> . (Werner, 1908 "1907" (Amphibia : Anura : Ptychadenidae) | <i>Zootaxa</i> 2115 : 65-68 | 0.740 |
| Biometry | 9 | Glèlè Kakaï R., Palm. R. | Empirical comparison of error rate estimators in logistic discriminant analysis. | <i>Journal of Statistical Computation and Simulation</i> . 79(2): 111-120. | 0.353 |
| Agroforestry | 10 | Houehounha R., Avohou H.T., Gaoue O.G., Assogbadjo A.E., Sinsin B. | Weed removal improves coppice growth of <i>Daniellia oliveri</i> and its use as fuelwood in traditional fallows in Benin. | <i>Agroforestry Systems</i> 78: 115-125 | 0.845 |
| Economic | 11 | Avocèvou-Ayisso, C., Sinsin, B., | Sustainable use of non-timber forest products: Impact of | <i>Forest Ecology and</i> | 2.110 |

| Disciplines | N° | Authors' Name | Title | Journals | Impact Factor |
|----------------|----|---|--|---|---------------|
| Botany | | Adégbidi, A., Dossou, G. & Van Damme, P. | fruit harvesting on <i>Pentadesma butyracea</i> regeneration and financial analysis of its products trade in Benin. | <i>Management</i> | |
| | 12 | Fifanou G. Vodouhê, Ousmane Coulibaly, Charlotte Greene, And Brice Sinsin | Estimating the Local Value of Non-Timber Forest Products to Pendjari Biosphere Reserve Dwellers in Benin | <i>Economic Botany</i> 63(4): 397-412 | 1.18 |
| | 13 | Assogbadjo A.E., Kyndt T., Chadare F.J., Sinsin B, Gheysen G, Eyog-Matig O. & Van. Damme P. | Genetic fingerprinting using AFLP cannot distinguish traditionally classified baobab morphotypes | <i>Agroforestry Systems</i> 75:157–165. | 0.845 |
| | 14 | De Caluwé, E., De Smedt, S., Assogbadjo, A.E., Samson, R., Sinsin, B. & Van Damme, P. (2009). | Ethnic differences in use value and use patterns of baobab (<i>Adansonia digitata</i> L.) in northern Benin. | <i>African Journal of Ecology</i> 47: 433–440 | 0.621 |
| | 15 | Richards P., de Bruin-Hoekzema M., Hughes S.G., Kudadjie-Freeman C., Offei S.K., Struijk P.C., Zannou A. | 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> 45(1/2): 196-214, 2009. | 0.356 |
| Ethnobiology | 16 | Dansi A., Adjatin A., Adoukonou-Sagbadja, Falade V H., Adomou A.C., Yedomonhan H., Akpagana K. & B. De Foucault 2009. | Traditional leafy vegetables in Benin: folk nomenclature, species under threat and domestication | <i>Acta Bot. Gallica</i> , 156 (2), 183-199. | 0.145 |
| | 17 | Akpona H., Akpona J.D., Kodjoli S., Awokou A. Y. & DOSSA L. | Inventory, folk classification and pharmacological properties of chewing sticks species in Benin. | <i>Journal of Medicinal Plants Research</i> | 0.400 |
| | 18 | Djagoun C.A.M.S., Akpona A. H., Sinsin B., G.A. Mensah & Dossa F. | Mongoose species in southern Benin: Preliminary ecological survey and local community perceptions. | <i>Mammalia</i> : 73: 27-32. | 0.340 |
| Social science | 19 | Teka O. & Vogt J. | Social perception of natural risks by local residents in developing countries – the example of the coastal area of Benin | <i>The Social Science Journal</i> 47: 215–224 | 0.22 |

Appendix 6: Articles published in peer-review journal without IF in the year 2009

| Disciplines | N° | Authors' Name | Title | Journals |
|-----------------------------|----|---|--|--|
| Forest ecology & management | 1 | Fandohan B., Assogbadjo A.E., Glèlè Kakaï R., Sinsin B., Van Damme P. | Impact of habitat type on the conservation status of tamarind (<i>Tamarindus indica</i> L.) in the W National Park of Benin | <i>Fruits</i> 65 (1): xx-xx DOI: 10.1051/fruits/2009037 (Indexed journal) |
| | 2 | Gouwakinnou G. N., Kindomihou V., Assogbadjo A. E. Sinsin B | Population structure and abundance of <i>Sclerocarya birrea</i> (A. Rich) Hochst subsp. <i>birrea</i> in two contrasting land-use systems in Benin | <i>International Journal of Biodiversity and Conservation</i> 1(6): 194-201. |
| | 3 | Georges Nobimè, Brice Sinsin and Jean-Marc Lernould, 2009 | Ecological factors determining the distribution of the red-bellied guenon <i>Cercopithecus e. erythrogaster</i> in Benin and Togo | <i>Int. J. Biol. Chem. Sci.</i> 3(3) : 606-611 |
| | 4 | Glèlè Kakaï R., Assogbadjo A.E., Sinsin B. | Regeneration naturelle et caractérisation spatiale des arbres de <i>Pterocarpus erinaceus</i> Poir de la zone soudanienne au Bénin. | <i>Revue ivoirienne des sciences et technologies</i> 13 : 199 – 212. |
| | 5 | Adomou A., Mama A., Missikpode R. & Sinsin B. | Cartographie et caractérisation floristique de la forêt marécageuse de Lokoli (Bénin). | <i>International Journal of Biological and Chemical Sciences</i> , 3(3) : 492-503. |
| | 6 | Houehounha R., Avohou H.T., Sinsin B. & Tandjiekpon A.M. | Approches de régénération artificielle de <i>Daniellia oliveri</i> (Rolfe)Hutchison & Dalziel | <i>International Journal of Biological and Chemical Sciences</i> , 3(1) : 7-19 |
| Ethnobiology | 7 | Akpona J-D., Glèlè Kakaï R., Akpona A. H., Sinsin B. | Ethnobotanique, structure et statut écologique des espèces de brosse végétale dans les formations naturelles de la région Sud du Bénin. | <i>Bulletin de la recherche agricole du Bénin</i> , 63, 1-12 |
| | 8 | Assogbadjo A.E., Amadji G., Glèlè Kakaï R., Mama | Evaluation écologique et ethnobotanique de <i>Jatropha curcas</i> L. au Bénin. | <i>International Journal of Biological and Chemical Sciences</i> , 5(3): 1065-1077 |

| Disciplines | N° | Authors' Name | Title | Journals |
|-----------------------------|----|--|---|---|
| | | A., Sinsin B. | | |
| | 9 | Djagoun, C.A.M.S. & Gaubert Philippe. | Small carnivorans from southern Benin: a preliminary assessment of diversity and hunting pressure. | Small Carnivore Conservation. Vol. 40: 1–10. |
| | 10 | Djenontin A.J.P., Houinato M. & Sinsin B. | Pratiques et stratégies des éleveurs face à la réduction de l'offre fourragère au Nord-Est du Bénin | <i>Sécheresse</i> , 20(4): 346-353. |
| Wildlife management | 11 | Djègo-Djossou S. & Sinsin B. | <i>Distribution et statut de conservation du colobe de Geoffroy (Colobus vellerosus)</i> | <i>International Journal of Biological and Chemical Sciences</i> , 6(3):1386-1397; (2009) |
| Rangeland management | 12 | Zoffoun A. Gbêliho; Houinato M.; Houessou L.G. & Sinsin B. | Effet de la pâture sur l'évolution des plateaux de tallage dans les pâturages artificiels au Bénin | <i>Bulletin of Animal Health and Production in Africa</i> (xxx-xxx) |
| Rangeland management | 13 | Aboh B.A., Oumorou M., Houinato M. & Sinsin B. | Analyse biologique et phytogéographique des savanes colonisées par <i>Chromolaena odorata</i> et <i>Hyptis suaveolens</i> dans la région de Bétécoucou (Bénin). | <i>Syst. Geogr. Pl.</i> 79: 81-82. |
| Biometry | 14 | Glèlè Kakaï R., Pelz D. R., Palm R. | Relative efficiency of non parametric error rate estimators in multi-group linear discriminant analysis. | <i>African Journal of Mathematics and Computer Science Research</i> , 2(10): 218-224 |
| | 15 | Glèlè Kakaï R., Pelz D. R., Palm R. | On the efficiency of the linear classification rule in multi-group discriminant analysis. | <i>African Journal of Mathematics and Computer Science Research</i> 3(1): 19-25 |
| | 16 | Glèlè Kakaï R., Pelz D. R. | Asymptotic error rate of linear, quadratic and logistic rules in multi-group discriminant analysis. | <i>International Journal of Applied Mathematics and statistics</i> 18(10): 69-81. |
| Plant sciences | 17 | Sounon M., Glèlè Kakaï R., Avakoudjo J., Assogbadjo A.E. & Sinsin B. | Tests de germination et de croissance de <i>Artemisia annua</i> L. <i>anamed</i> sur différents substrats au Bénin. | <i>International journal of biological and chemical sciences</i> , 3(2): 337-346. |
| | 18 | Comlan H., Glèlè Kakaï R., Assogbadjo A. E., | Test de la germination des graines de <i>Caesalpinia bonduc</i> (L.) Roxb au Bénin. | <i>International journal of biological and chemical sciences</i> , 3(2): 310-317. |

| Disciplines | N° | Authors' Name | Title | Journals |
|---------------------------------------|----|--|--|---|
| | | Odjo T., Sinsin B. | | |
| Economic Botany | 19 | Ekúé, M.R.M., Gailing, O., Finkeldey, R. and Eyog-Matig, O., 2009. | Indigenous knowledge, traditional management and genetic diversity of the endogenous agroforestry species ackee (<i>Blighia sapida</i>) in Benin. | <i>Acta Horticulturae</i> 806: 655-661 |
| | 20 | Zannou A., Struik P.C., Richards P. | The value of yam diversity in the transition Guinea Sudan zone of Benin: market evidence | <i>Quarterly Journal of International Agriculture</i> 48 (1):67-80, 2009. |
| | 21 | Zannou A. | Economic assessment of seed-tuber practices of yam <i>Dioscorea cayenensis</i> and <i>D. rotundata</i> planting materials. | <i>African Journal of Agricultural Research</i> 4(3) : 200-207, 2009. |
| | 22 | Zannou A. | Déterminants de l'allocation des terres aux variétés du niébé (<i>Vigna unguiculata</i>) par les paysans au Centre du Bénin. | <i>Bulletin de la Recherche Agronomique du Bénin</i> 63 : 19-26, 2009. |
| | 23 | Zannou A. | Déterminants de l'allocation des terres et de la demande de diversification variétale des ignames (<i>Dioscorea</i> sp.) dans les systèmes d'exploitation du Centre du Bénin. | <i>Bulletin de la Recherche Agronomique du Bénin</i> 64 : 11-18, 2009. |
| | 24 | Codjia J.T.C., Vihotogbe R., Assogbadjo A.E. & Biaoou G. | Le marché du crinclin (<i>Corchorus tridens</i>) au Bénin. | <i>Annales des Sciences Agronomiques</i> 12 (1): 15-33 |
| Genetics and molecular biology | 25 | Zannou A., Agbicodo E., Zoundjihékpon J., Struik P. C., Ahanchédé A., Kossou D. K., & Sanni A. | Genetic variability in yam cultivars from the Guinea – Sudan zone of Benin assessed by random amplified polymorphic DNA | <i>African Journal of Biotechnology</i> : 8(1): 026 – 036 http://www.academicjournals.org/AJB ISSN 1684 – 5315 |
| | 26 | Zannou A., Kossou DK., Ahanchédé A., Zoundjihékpon J., Agbicodo E., Struik P. C., & | Genetic variability of cultivated cowpea in Benin assessed by random amplified polymorphic DNA | <i>African Journal of Biotechnology</i> : 7(24): 4407 - 4414 http://www.academicjournals.org/AJB ISSN 1684 - 5315 |

| Disciplines | N° | Authors' Name | Title | Journals |
|------------------|----|--|---|---|
| | | Sanni A. | | |
| Climate change | 27 | Teka O., Mallik B. & Vogt J. | Climate change and agricultural production - analysis of interrelationship and evaluation of food security in coastal area of Benin | <i>Earth and Environmental Science</i> 6 : 472016 doi:10.1088/1755-1307/6/7/472016 |
| Phytosociology | 28 | Djègo J. & Oumorou M. | Phytosociologie de sous-bois et impact des plantations forestières sur la diversité floristique dans la forêt classée de la Lama. | <i>Annales des Sciences Agronomiques du Bénin</i> . 12 (1) 35-54, 2009 ISSN 1659-5009. 1226-1237. |
| Ethnobotany | 29 | Deleke Koko I. K. E., Djègo J., Hounzangbe-Adote M. S., Sinsin B. | Etude ethnobotanique des plantes galactogènes et emménagogues utilisées dans les terroirs riverains à la Zone Cynégétique de la Pendjari. | <i>Int. J. Biol. Chem. Sci.</i> , Volume 3, Number 6. ISSN 1991-8631 |
| Animal nutrition | | S. Babatounde, M. R. B. Houinato, S. S. Toleba, T. Lecomte C. C. Adandedjan & A. Buldgen | Caractéristiques de dégradabilité in sacco et valeurs protéiques des légumineuses fourragères cultivées au Bénin. | <i>Annales des sciences Agronomiques</i> 12 (2) 117-145 |

Appendix 7: Articles in press in peer-review journal with IF in the year 2009

| Disciplines | N° | Authors' Name | Title | Journals | Impact Factor |
|----------------|----|--|---|--|---------------|
| Forest ecology | 1 | Assogbadjo A. E., Glèlè Kakaï R., Sinsin B., Pelz D. | Structure of <i>Anogeissus leiocarpa</i> Guill., Perr. Natural stands in relation to anthropogenic pressure within Wari-Marô Forest Reserve in Benin. | <i>African journal of ecology</i> doi: 10.1111/j.1365-2028.2009.01160.x | 0.621 |
| Plant sciences | 2 | Assogbadjo A.E, Glèlè Kakaï R., Edon S., Kyndt T., Sinsin B. | Natural variation in fruit characteristics, seed germination and seedling growth of <i>Adansonia digitata</i> L. in Benin | <i>New forests</i> | 0.845 |
| | 3 | Cuni Sanchez A., Haq N. & Assogbadjo A.E. | Variation in baobab leaf morphology and its relation to drought tolerance. 9447-x | <i>Genetic Resource and Crop Evolution (in press)</i> . DOI: 10.1007/s10722-009- | 0.967 |

| Disciplines | N° | Authors' Name | Title | Journals | Impact Factor |
|-----------------------|----|---|---|--------------------------------|---------------|
| Conservation genetics | 4 | Gaubert P., Machordom A., Morales A., Lopez Bao J., Veron G., Amin M., Sofia Queirós Barros T, Basuony M., Djagoun C. A. M. S., Do Linh San E., Santos Fonseca C. M. M., Geffen E., Gouichiche M., Ozkurt S. O., Cruaud C., Couloux A. And F. Palomares | Different ways of crossing the Strait of Gibraltar: Phylogeographic discordance between two African small carnivorans supposedly introduced in south-western Europe | <i>Journal of Biogeography</i> | 4.566 |

Appendix 8: Articles in press in peer-review journal without IF in the year 2009

| Disciplines | N° | Authors' Name | Title | Journals |
|--|----|--|---|---|
| Ethnobiology | 1 | Avocèvou C., Avohou T.H., Oumorou M, Dossou G. & Sinsin B. | Ethnobotany of <i>Pentadesma butyracea</i> in Benin: A Quantitative Approach. | <i>Ethnobotany Research and Applications</i> |
| Wildlife management | 2 | Djègo-Djossou S. & Sinsin B. | Ecologie comportementale du colobe de Geoffroy (<i>Colobus vellerosus</i>) dans la forêt sacrée de Kikélé | <i>Folia primatologica</i> |
| Plant Ecophysiology | 3 | Kindomihou V., Meerts P., Kjelgren R. & Sinsin B. | Effect of moisture stress on leaf silicification of three tropical fodder grass species (<i>Pennisetum purpureum</i> , <i>Panicum maximum CI</i> and <i>Panicum maximum</i> Jacq) in Republic of Benin (Western Africa). | <i>American-Eurasian Journal of Agricultural and Environmental Sciences</i> |
| Development Economics, International trade | 4 | Zannou A. | Determinants of intra-ECOWAS trade flows. | <i>African Journal of Business Management, February 2010</i> |
| Social science | 5 | Teka O. & Vogt J. | Method of Local Assessment of Natural Risks in Tropical Countries - Example of the Coastal Zone of Benin (West Africa) | <i>Geographic wrok of Bayreuth</i> |

Appendix 9: Articles under review in peer-review journal with IF in the year 2009

| Disciplines | N° | Authors' Name | Title | Journals | Impact Factor |
|--------------------------------------|----|--|--|---|---------------|
| Economic Botany | 1 | Vodouhê G.Fifanou, Coulibaly Ousmane, Adégbidi Anselme & Sinsin Brice | Community perception of biodiversity conservation within protected areas in Benin | <i>Forest Policy and Economics</i> | 0.768 |
| | 2 | Ekué, M.R.M., Gailing, O., Sinsin, B. and Finkeldey, R. | Uses, traditional management, perception of variation and preferences in ackee (<i>Blighia sapida</i>) fruits traits in Benin: implications for domestication and conservation | <i>Journal of Ethnobotany and Ethnomedicine</i> | 1.35 |
| | 3 | Fandohan B., Assogbadjo A.E., Glèlè Kakaï R., Kyndt T., Codjia J.T.C., Sinsin B. | Quantitative morphological characterization of <i>Tamarindus indica</i> L. fruits confirms traditionally classified morphotypes | <i>Genetic Resources and Crop Evolution</i> | 0.967 |
| Genetic and molecular biology | 4 | Ekué M.R.M., Gailing O., Vornam B. and Finkeldey R. | Assessment of the domestication state of ackee (<i>Blighia sapida</i>) in Benin based on AFLP and microsatellite markers | <i>Conservation Genetics</i> | 2.4 |
| Biodiversity conservation | 5 | Fandohan B., Assogbadjo A.E., Glèlè Kakaï R., Gaoue G.O., Fonton H. N. & Sinsin B. | Effectiveness of Parks network in the conservation of <i>Tamarindus indica</i> L. (Cesalpinioideae) in Benin | <i>Forest Ecology and Management</i> | 2.110 |
| | 6 | Vodouhê G. Fifanou, Coulibaly Ousmane, Biaou Gauthier & Sinsin Brice | Traditional Agroforestry Systems and Biodiversity Conservation in Benin | <i>Agroforestry systems</i> | 0.8 |
| Ethnobiology | 7 | Fandohan B., Assogbadjo A.E., Glèlè Kakaï R., Kyndt T., De Calume E., Codjia J.T.C., Sinsin B. | Women traditional knowledge, use value and contribution of tamarind (<i>Tamarindus indica</i> L.) to rural households' cash income in Benin | <i>Economic Botany</i> | 1.18 |
| Grass and forage science | 8 | Kindomihou V., Sinsin B., Meerts P. | Silica concentration is related to leaf traits but not to a specific anatomical tissue in tropical fodder grass species | <i>Functional Plant Biology</i> | 2,258 |
| Plant ecology and management | 9 | Fandohan B., Assogbadjo A.E., Glèlè Kakaï R., Sinsin B. & Van Damme P. | Distribution, abundance and productivity in fruit, pulp and seed of Djétami tree (<i>Tamarindus indica</i> L.) in relation to the climatic gradient in Benin | <i>Agroforestry Systems</i> 75: 157–165. | 0.845 |
| | 10 | Glèlè Kakaï R., Lokonon B., Assogbadjo A.E., Bonou W., Codjia J.T.C., Gnanglè C. & Sinsin B. | Caractérisation structurale et analyse des possibilités de gestion des populations naturelles de <i>Dialium guineense</i> dans la forêt classée de la | <i>Cahiers Agriculture</i> | 0.3 |

| Disciplines | N° | Authors' Name | Title | Journals | Impact Factor |
|-------------|----|---|--|--------------------------------------|---------------|
| | | | Lama au Bénin | | |
| | 11 | Orou G. Gaoue, Enoch Achigan-Dako, Fifanou Vodouhe, Sylvestre C.A.M. Djagoun, Jean Didier Akpona, Aristide Adomou, Achille Assogbadjo and Mireille Toyi | Demographic structure of <i>Rauvolfia vomitoria</i> Afzel., an endangered medicinal plant limited to disturbed habitats in Benin | <i>Forest ecology and management</i> | 2.110 |

Appendix 10: Articles under review in peer-review journal without IF in the year 2009

| Disciplines | N° | Authors' Name | Title | Journals |
|-------------------------------|----|--|---|--|
| Economic Botany | 1 | Djogbénou C. P., Glèlè Kakaï R., Sinsin B. | Comparative analysis of stakeholders' perceived success of participatory management designs of forest reserves in Benin. | <i>International Journal of Social Forestry.</i> |
| Biodiversity and Conservation | 2 | Djagoun C. A. M. S., Glele Kakaï R., Konnon D-D, Sewadé C., Kouton M., Bonou W., Gouwakinnou G., Fandohan B. | Potentiel des ressources végétales forestières alimentaires et médicinales de la forêt classée de l'Ouémé supérieur et N'Dali au Nord Bénin | <i>Fruit, Vegetable and Cereal Science and Biotechnology</i> |

Appendix 11: Publications in proceedings in the year 2009

| Field of research | N° | Authors' Name | Title | Full References |
|-------------------|----|---|---|---|
| Ethnobiology | 1 | Akpona A. H., Sogbohossou E., Sinsin B., Houngnihin R. A., J-D ;T. Akpona and Akouehou G. | <i>Botanical gardens as a tool for preserving plant diversity, threatened relic forest and indigenous knowledge on traditional medicine in Benin.</i> | In Pamotta, Oteng-Yeboah & Cobbinah (eds), Proceedings of Conference on <i>Traditional Forest-related Knowledge and Sustainable Forest Management in Africa</i> , IUFRO World Service, Volume 23. 15 th -17 th October 2008; IUFRO Accra 2009; ISSN 1016-3263; ISBN 978-3-901347-81-8; p. 5 |
| | 2 | Fandohan A. B., Assogbadjo A. E. and Sinsin B. | Endogenous Knowledge On Tamarind (<i>Tamarindus Indica L.</i>) In Northern Benin | In J. A. Parrotta, A. Oteng-Yeboah and J. Cobbinah (eds) <i>Traditional Forest-Related Knowledge and Sustainable Forest Management in Africa. IUFRO World Series</i> Vol. 23, pp: 57-62. ISSN 1016-3263; ISBN 978-3-901347-81-8. |

| Field of research | N° | Authors' Name | Title | Full References |
|--|----|--|--|--|
| | 3 | Avocèvou C., Sinsin B., Oumorou M., Dossou G. & Donkpègan A. | Ethnobotany Of <i>Pentadesma Butyracea</i> In Benin: A Quantitative Approach | In J. A. Parrotta, A. Oteng-Yeboah and J. Cobbinah (eds) Traditional Forest-Related Knowledge and Sustainable Forest Management in Africa. <i>IUFRO World Series</i> Vol. 23, pp: 154-164. ISSN 1016-3263; ISBN 978-3-901347-81-8. |
| | 4 | Gouwakinou G. N., Kindomihou V., Sinsin B | Utilisation and local knowledge of <i>Sclerocarya birrea</i> (Anacardiaceae) by rural population around W National Park in Karimama district (Benin) | In J. A. Parrotta, A. Oteng-Yeboah and J. Cobbinah (eds) Traditional Forest-Related Knowledge and Sustainable Forest Management in Africa. <i>IUFRO World Series</i> Vol. 23, pp: 49-56. ISSN 1016-3263; ISBN 978-3-901347-81-8. |
| | 5 | Djagoun C.A.M.S., Kindomihou V. and B. Sinsin | Diversity and ethnozoological study of small mammals in villages of the Pendjari Biosphere Reserve in northern Benin | In Pamotta, Oteng-Yeboah & Cobbinah (eds), Proceedings of Conference on Traditional Forest-related Knowledge and Sustainable Forest Management in Africa, <i>IUFRO World Series</i> , Volume 23. 15 th -17 th October 2008; IUFRO Accra 2009; ISSN 1016-3263; ISBN 978-3-901347-81-8; pp. 191-198. |
| Economic Botany | 6 | Vodouhè G. F., Coulibaly O. & Sinsin B. | Estimating Local Values Of Vegetable Non-Timber Forest Products To Pendjari Biosphere Reserve Dwellers In Benin | In J. A. Parrotta, A. Oteng-Yeboah and J. Cobbinah (eds) Traditional Forest-Related Knowledge and Sustainable Forest Management in Africa. <i>IUFRO World Series</i> Vol. 23, pp: 63-72. ISSN 1016-3263; ISBN 978-3-901347-81-8. |
| Parasitology | 7 | Zoffoun A. G., Sahidou S.; Houinato M. & Sinsin B. | Interactions ticks, hosts and pastures: case of the Girolando dairy cattle and the artificial pastures of <i>Panicum maximum</i> and <i>Panicum maximum var CI</i> | ABEPA 2009 |
| Biometry | 8 | Glèlè Kakaï R., Pelz D. R., Palm R. | Relative efficiency of non parametric error rate estimators in multi-group linear discriminant analysis. | ISBN 978-90 73592 29 2 |
| Biodiversity & Conservation | 9 | Adomou A.C., Sinsin B., Akoegninou A. & Van Der Maesen J. | Plant species and ecosystems with high conservation priority in Benin. | In: X. van der Burgt, J. van der Maesen & J.-M. Onana (eds), Systematics and conservation of African plants, pp. 427-441. Royal Botanic Gardens, |

| Field of research | N° | Authors' Name | Title | Full References |
|----------------------------|----|--|--|--|
| | | | | Kew. |
| Non-timber forest products | | Alice Bonou, A. Adégbidi and B. Sinsin | Endogenous knowledge on non-timber forest products in northern Benin | <i>In</i> Pamotta, Oteng-Yeboah & Cobbinah (eds), Proceedings of Conference on Traditional Forest-related Knowledge and Sustainable Forest Management in Africa, <i>IUFRO World Series</i> , Volume 23. 15 th -17 th October 2008; IUFRO Accra 2009; ISSN 1016-3263; ISBN 978-3-901347-81-8; p. 48 |

Appendix 12: Abstracts in books of abstracts in the year 2009

| Field of research | N° | Authors' Name | Title | Full References |
|--------------------------------------|----|--|---|---|
| Wildlife /protected areas management | 1 | Georges Nobimè et Brice Sinsin | Le cercopithèque à ventre rouge <i>Cercopithecus e. erythrogaster</i> Gray 1866 dans la forêt classée de la Lama : quelques aspects d'éthologie | ABEPA 2009 |
| | 2 | Djègo-Djossou S. & Sinsin B. | Ecologie comportementale du colobe de Geoffroy (<i>Colobus vellerosus</i>) au Bénin | Folia Primatologica |
| Economic Botany | 3 | Vodouhè G. Fifanou | Community Perception of Biodiversity Conservation within Protected Areas: Case of Pendjari National Park, Benin. | First World Young Earth-Scientist Congress. Beijing China. October, 25-28. |
| | 4 | Vodouhè G. Fifanou. | Estimating Local Values of Vegetable Non-Timber Forest Products to Pendjari Biosphere Reserve Dwellers in Benin. | 2 ^{me} Colloque des sciences, cultures et technologies de l'UAC – Benin sur le thème: Contribution des laboratoires de recherche à la formation des compétences et au développement technologique, socioéconomique et culturel des nations». Abomey-Calavi, Benin. May, 26-30. |
| | 5 | Vodouhè G. Fifanou | Potential role of <i>Parkia biglobosa</i> (Jacq.) R.Br. ex Benth. harvesting in local people income generation in Benin | Regional workshop on the Potential role of local fruit trees and other food tree species for nutrition, poverty alleviation and biodiversity conservation in Sub-Saharan Africa: factors to consider. Ouagadougou, Burkina Faso. February, 23-26. |
| | 6 | Gouwakinnou N.G., Kindomihou V., Sinsin B. | Utilization and population status of <i>Sclerocarya birrea</i> in Karimama district nearby W National Park | Regional Conservation Science-Policy Conference of Society of Conservation Biology on “from Conservation Science to Policy in Africa”. February 28-30, Accra Ghana. |
| | 7 | Gouwakinnou, N.G., | Sex ratio, spatial distribution and local perception of | <i>Tropentag 2009</i> on “Biophysical and Socio-economic Frame |

| Field of research | N° | Authors' Name | Title | Full References |
|-----------------------------|----|--|---|---|
| | | Sinsin, B | sexual dimorphism in <i>Sclerocarya birrea</i> subsp. <i>birrea</i> , a dioecious species population in Northern Benin | Conditions for Sustainable Management of Natural Resources". 6 – 8 October 2009, Hamburg, Germany. |
| Agroforestry | 8 | Gouwakinnou, N.G., Kindomihou, V. Sinsin, B | Utilization and population structure of <i>Sclerocarya birrea</i> subsp <i>birrea</i> in agroforestry systems versus protected area in Karimama District (Benin) | World Agroforestry Centre. 2009. Book of Abstracts, 2 nd World Congress of Agroforestry, <i>Agroforestry - The Future of Global Land Use</i> . World Agroforestry Centre, Nairobi (Kenya), 23-28 August 2009. ISBN 978-92-9059-255-6; p. |
| | 9 | Bruno A. Djossa, Jakob Fahr, Elisabeth K. V. Kalko & Brice A. Sinsin | The influence of agroforestry practices on plant species and implications for feeding resources availability for fruit bats | World Agroforestry Centre. 2009. Book of Abstracts, 2 nd World Congress of Agroforestry, <i>Agroforestry - The Future of Global Land Use</i> . World Agroforestry Centre, Nairobi (Kenya), 23-28 August 2009. ISBN 978-92-9059-255-6; p. 497. |
| | 10 | Gouwakinnou N.G., Sinsin B. | Phenotypic variations of <i>Sclerocarya birrea</i> subsp. <i>birrea</i> fruits and components traits in agroforestry systems in Northern Benin | All Africa Horticultural Congress, Safari Park Hotel, Nairobi, Kenya, 31 st August to 3 rd September 2009. |
| | 11 | Dossou-Yovo H. O., Assogbadjo A. E., Kindomihou Valentin & Sinsin B. | How do termitaria contribute to plant species conservation in Pendjari Biosphere Reserve in Benin? | World Agroforestry Centre. 2009. Book of Abstracts, 2 nd World Congress of Agroforestry, <i>Agroforestry - The Future of Global Land Use</i> . World Agroforestry Centre, Nairobi (Kenya), 23-28 August 2009. ISBN 978-92-9059-255-6; p. 192. |
| Biodiversity & conservation | 12 | Vodouhè G. Fifanou | The role of traditional agroforestry practice in biodiversity conservation and poverty alleviation: The Pendjari Biosphere Reserve case study in Benin. | World Congress of Agroforestry: -The Future of Global Land Use. Nairobi, Kenya. August, 23-28. |
| | 13 | Djagoun S, Sinsin B. & Kindomihou V. | Diversity and Ethnozoological Study of Small Mammals in Villages Surrounding the Pendjari Biosphere Reserve in Northern Benin. | http://www.docstoc.com/docs/20029505/ p.16 |
| Reproduction biology | 14 | Gouwakinnou, N.G., Sinsin B. | Leafing, flowering and fruiting of <i>Sclerocarya birrea</i> subsp. <i>birrea</i> in semi-arid savanna of Northern Benin: Preliminary results | 2 ^{ème} Colloque des sciences, cultures et technologies de l'UAC – Benin sur le thème: Contribution des laboratoires de recherche à la formation des compétences et au développement technologique, socioéconomique et culturel des nations. 26-30 May 2009, Abomey-Calavi, Benin. |
| Forest ecology & Management | 15 | Gouwakinnou, N.G., Kindomihou V., Sinsin B. | Population structure of <i>Sclerocarya birrea</i> (A.Rich) Hochst subsp. <i>birrea</i> (Anacardiaceae) in agroforestry systems compared with a protected area in Northern Benin | Joint Meeting of Association for Tropical Biology and Conservation & Society for Tropical Ecology on "Impacts of Gobar Change on Tropical Ecosystems". 27-30 July 2009, Marburg, Germany. |
| Restoration | 16 | Avakoudjo J., Kindomihou | Local population perception on erosion and soil | 1 st Regional Meeting of the Africa Section for Conservation |

| Field of research | N° | Authors' Name | Title | Full References |
|-----------------------|----|---|---|---|
| Ecology/Conservation | | V. & Sinsin B. | degradation causes in Karimama (Benin) | <i>Biology</i> . Book of Programmes and Abstracts. Accra Ghana, Legon University of Ghana, 28-30 January 2009. p.7. www.conbio.org/Sections/Africa/.../PROGRAM%20&%20ABSTRACT.pdf |
| Conservation genetics | 17 | Assogbadjo A.E., Kyndt T., Sinsin B., Gheysen G. & Van Damme P. | Conservation genetics of baobab (<i>Adansonia digitata</i> L.) in the parklands agroforestry systems of Benin (West Africa). | World Agroforestry Centre. 2009. Book of Abstracts, 2 nd World Congress of Agroforestry, <i>Agroforestry - The Future of Global Land Use</i> . Nairobi: World Agroforestry Centre. Nairobi (Kenya), 23-28 August 2009. ISBN 978-92-9059-255-6; p. 81 |

Appendix 13: Technical Reports and books in the year 2009

| Field of research | N° | Authors' Name | Title | References |
|--------------------------------------|----|---|--|--|
| Agroforestry and plant domestication | 18 | Assogbadjo A.E., Sinsin B., De Caluwe E. & Van Damme P. (2009). | Développement et domestication du baobab au Bénin. | LEA-FSA-UAC/DADOBAT, Cotonou, Bénin. 73 pages. ISBN: 978-99919-63-69-3 |

Appendix 14: Participation at workshops/conferences in the year 2009

| N° | Title and period | Contexts | Representative LEA researchers |
|----|--|---|---|
| 1 | World Congress of Agroforestry 2009; Nairobi, Kenya: 23 rd -28 th August, 2009. | International Conference | 1. Emile N. HOUNGBO, 2. Achille E. Assogbadjo 3. Bruno Djossa 4. Fifanou Vodouhê |
| 2 | 1 st Alumni meeting of African Fellow Programme of Rothamsted International; Cape Town, South Africa, 2-3 October, 2009 | Rothamsted International African fellows alumni workshop | 1. Ekué M.R.M. , 2. Achille E. Assogbadjo 3. Prof. Brice Sinsin |
| 3 | 22ème colloque de la Société Francophone de Primatologie (SFDP) ; 21 - 23 octobre 2009, Liège (Belgique) | International Workshop | 1. Georges Nobimè 2. Sylvie Djègo - Djossou |
| 4 | Global Development Network's 10 th Annual Conference – Natural Resources and Development. Kuwait, February 3 – 5, 2009 | International Workshop (Arab Fund for Economic and Social | Carole Avocèvou |

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| | | Development , Kuwait) | |
| 5 | Frankfurt summer school from 25. 07. to 19.08.2009 | Training workshop (BIOTA-Project) | 1. Carole Avocèvou 2. Belarmain Fandohan 3. Gérard Gouwakinnou 4. Laurent Houéssou 5. Julien Avakoudjo 6. Brice Tenté |
| N° | Title and period | Contexts | Representative LEA researchers |
| 6 | Les Fondements holistiques pour l'évaluation et la régulation du génie génétique et des Organismes Génétiquement Modifiés en Afrique ; 30 Novembre-12 Décembre 2009 | Training workshop | 1. Belarmain Fandohan 2. Solange Edon |
| 7 | International Workshop on Statistical and Spatial Analysis of Diversity Data 9-13 November 2009, Bamako (Mali) | Training workshop | 1. Gerard Gouwakinnou, 2. Belarmain Fandohan 3. Romaric Vihotogbé 4. Solange Edon |
| 8 | DIVERSITAS OSC2 second World Congress; 3-16 October 2009; Cape Town, South Africa | International conference | Belarmain Fandohan |
| N° | Title and period | Contexts | Representative LEA researchers |
| 9 | Association of Tropical Biology and Conservation Conference, 20-26 July 2009; Marburg, Germany. | BIOTA-Project | 1. Carole Avocèvou 2. Fandohan Belarmain 3. Gérard Gouwakinnou 4. Laurent Houéssou 5. Julien Avakoudjo 6. Brice Tenté |
| 10 | 2 ^{ème} Colloque des Sciences, Cultures et Technologies de l'UAC –Bénin, 26-30 mai 2009, Abomey-Calavi, Bénin | National workshop | Alex G. Zoffoun |
| 11 | 16 ^e Journée de l'Association Béninoise de Pastoralisme, 05 décembre 2009, l'ISBA Cotonou | National workshop | Alex G. Zoffoun |
| 12 | 6 ^e Edition de l'Atelier Scientifique National de l'INRAB, du 02 au 04 décembre 2009, Parakou, Bénin. | National workshop | Alex G. Zoffoun |
| 13 | 57 th session of the International statistical Institute, 16-22 August, Durban, South Africa. | International workshop | Romain Glele Kakaï |
| 14 | Workshop of African statisticians, University of Marien-Ngouabi, Brazaville, Congo | International workshop | Romain Glele Kakaï |

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| 15 | 10 th AUF-BIOVEG Regional Scientific Meeting on: “biotechnologies et valorisation du patrimoine végétal sous-exploité en zone sahélienne et soudano-sahélienne”. Dakar (Sénégal), 10-13 Novembre 2009. | International workshop | Achille E. Assogbadjo |
| N° | Title and period | Contexts | Representative LEA researchers |
| 16 | ANAFE/ICRAF board meeting; Accra (Ghana), 02-07 August 2009 | Regional workshop | Achille E. Assogbadjo |
| 17 | Symposium of African Botany. Brussels, ULB-Brussels-Belgium, 27 March 2009 | International workshop | Achille E. Assogbadjo |
| 18 | FAO sub-regional workshop on the preparation of a report on the state of the world's forest genetic resources. Ouagadougou, Burkina Faso, 20-21 February 2009 | International workshop | Achille E. Assogbadjo |
| 19 | Regional workshop on local food tree species for nutrition, poverty and biodiversity conservation in Sub-Saharan Africa. Ouagadougou, Burkina Faso, 23-26 February 2009. | Regional workshop | Achille E. Assogbadjo |
| 20 | Technical/research paper writing workshop, Addis Ababa, Ethiopia 15 – 21 November 2009. | International training workshop | Valentin Kindomihou |
| N° | Title and period | Contexts | Representative LEA researchers |
| 21 | International course on Organic agriculture, Coventry University (UK). 19 August – 13 September 2009. | International training workshop | Valentin Kindomihou Hubert Dossou Yovo |
| 22 | Inception meeting for the West African Network for Organic Agriculture Research and Training (WANOART/ROAFRAB). Cape Coast University, Ghana. 10-11 march 2009. | International workshop | Valentin Kindomihou Prof. Brice Sinsin |
| 23 | Inception meeting for Regional Food Developers Initiative; MRCI/08/F07/P33 Developing capacity building for young food developers for poverty reduction in West Africa 2009-2011. Food and organic agriculture network.University of Agriculture of Abeokuta, Ogun State, Nigeria. 28 february – 3 march 2009. | Regional workshop | Valentin Kindomihou |
| 24 | Atelier de Validation de l'Analyse Diagnostique Transfrontalière pour l'Inversion des tendances. Autorité du Bassin du Niger, Niamey, Niger, 6-10 juin 2009 | International validation meeting | Valentin Kindomihou |
| 25 | Tropical Biology Association Field course. Uganda: 1st to 30th November 2009, | Workshop training | Sylvestre C. A. M. Djagoun |
| 26 | Séminaire de finance carbone CASCARDe tenu à la chambre de commerce de Cotonou (Bénin) ; 23 au 27 novembre 2009, | International workshop | Julien Djègo |

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| 27 | Atelier sur l'ingénierie de l'éducation à distance : élaboration de nouveaux curricula de formation professionnelle continue (FPC) à distance (la mise en pratique) tenu à Abomey-Calavi, Bénin, 11 au 15 mai 2009. | International workshop | Julien Djègo |
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Appendix 15: Research projects in LEA in the year 2009

| N° | Title of the project | Sources of Funding | Objectives | Status |
|----|---|--------------------|--|----------------|
| 1. | Domestication And Development Of Baobab And Tamarind (DADOBAT) | European Union | <ol style="list-style-type: none"> 1. Evaluation and characterization of germplasm collected in different ecological zones in Benin, Mali and Senegal; 2. Eco-physiological characterization of field and greenhouse-grown material; 3. Domestication of superior germplasm material; 4. Development of adapted cropping techniques; development of adapted plant material for introduction into (traditional and improved) agroforestry systems; 5. Evaluation of nutritional/medicinal composition of different plant parts; 6. Improvement of processing/transformation of the species' products; 7. 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 | Ongoing |

| N° | Title of the project | Sources of Funding | Objectives | Status |
|----|---|---|---|-----------------------|
| | | | <p>of sustainable use;</p> <ol style="list-style-type: none"> 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 actions in selected areas – planned in close collaboration between scientists and local people and carried out by local people with support from scientists. 8. Dissemination | |
| 3. | <p>BIOdiversity Monitoring Transect Analysis in Africa (BIOTA)</p> | <p>German Federal Ministry of Education and Research within the frame of the BIOLOG programme</p> | <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 savanna 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 rapid assessment 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. | <p>Ongoing</p> |
| 4. | <p>West African Network for Organic</p> | <p>Edulink-European Union</p> | <ol style="list-style-type: none"> 1. to build a network for higher education institutes in West Africa | |

| N° | Title of the project | Sources of Funding | Objectives | Status |
|----|--|---|--|----------------|
| | <p>Agriculture Research and Training</p> <p>WANOART/ROAFRAB</p> | | <p>for building capacities in organic agriculture, allowing West Africa to well profit its own potential in this field of activity.</p> <ol style="list-style-type: none"> 2. to increase the expertise level in every aspect of organic agriculture in West Africa. 3. to provoke a higher conscience for organic agriculture ; 4. to build a curriculum for organic agriculture in higher education institutes in West Africa; 5. to contribute to a notable (i.e. quantitative and qualitative) increase of research in organic agriculture ; 6. to attend a high habilitation with international markets and standards for certification; 7. to contribute to a raise of qualified staff in organic agriculture; 8. enhance a qualified environment, food security for farmers and the whole human society 9. to favour regional links for scientific collaboration throughout various research projects; 10. to enhance equipments acquisition for training in organic agriculture in west Africa 11. to find guidelines for standards for organic production for West Africa ; 12. to develop staff and students exchanges among partners; 13. to enhance a sustainable network for promoting research in organic agriculture in West Africa | |
| 5. | <p>Hessian State Initiative for the Development of Scientific and Economic Excellence</p> <p>LOEWE</p> | <ol style="list-style-type: none"> 1. Senckenbergische Naturforschende Gesellschaft 2. Goethe Universität Frankfurt am Main <p>(linked to BIOTA & SUN-EU)</p> | <ol style="list-style-type: none"> 1. to carry out internationally outstanding research on the interactions of biodiversity and Climate change at the organism level 2. study of Dynamics of savannas and their ecosystem services 3. to investigate the dynamics of west African savannas under different climate and land use scenarios 4. to model and map distribution changes under different services. 5. To combine change scenarios with different parameters of ecosystem services to evaluate the possible consequences of | Ongoing |

| N° | Title of the project | Sources of Funding | Objectives | Status |
|----|--|--|--|----------------|
| | | | these changes for rural communities 6. To perform compiling of available data and ecological niche modeling approaches | |
| 6 | Rift Dynamics, Up-lift and Climate Change: Interdisciplinary Research Linking Asthenosphere, Lithosphere, Biosphere and Atmosphere PROJECT C2 | International Grant for financial support with research unit | 1. To test the hypothesis of the causal link between climatic and faunal change for faunal groups of different ecosystems 2. To analyze eastern African terrestrial and lacustrine community structure in temporal and geographical context 3. To analyze the evolutionary adaptation pattern in relation environmental change by analyzing both groups in an extended supra-regional context (Southern and North Eastern Africa) 4. To extend the data base for paleoclimatic interpretations, i.e. for gastropod and bovid data 5. To search the impact of climatic and environmental variability on faunal composition and distribution of molluscan and bovid faunas in Eastern Africa | Ongoing |

Appendix 16: Research Grants in the year 2009

| N° | Title of Grant | Beneficiaries | Status |
|----|---|---|---------|
| 1 | Charlotte Fellowship, African Wildlife Foundation | Etotépé Sogbohossou | Ongoing |
| 2 | International Foundation for Science | Gerard N. Gouwakinnou Laurent Houéssou | Ongoing |
| 3 | American Society Primatological (ASP) conservation | Sylvie Djègo- Djossou | Ongoing |
| 4 | People's Trust For Endangered Species Grant (UK) | Achille Assogbadjo | Ongoing |
| 5 | West African Economic Organization (UEMOA) grants for training and research | Sylvestre C.A.M. Djagoun | Ongoing |

Appendix 17: Prizes and nomination in the year 2009

| N° | Title of prize / nomination | Nominee |
|----|--|-----------------------|
| 1 | Heinz and Johannes Prize for the Best research paper on ecological measurements in Africa: The Support Africa International Foundation, Koblenz, Germany. | Achille E. Assogbadjo |
| 2 | Organic Agriculture Expert Award for the Partnership with Regional Food Developers Initiative; MRCI/08/F07/P33 Developing capacity building for young food developers for poverty reduction in West Africa 2009-2011. Association of African Universities (AAU), MRCI-Accra-North (Ghana). | Valentin Kindomihou |

Appendix 18: Visitors received in the year 2009

| N° | Full names of visitors | Provenance | Responsibles in LEA | Topics |
|----|------------------------|-------------|---------------------|---|
| 1 | Heubach Katja | Germany | Prof Sinsin Brice | Research LOEWE |
| 2 | Thibaut Mathieu | Switzerland | Tchibozo Hugues | Stagiaire au Ministère de la Santé |
| 3 | Pobeizejnik Igor | France | Nobimè Georges | Planète urgence : écologie appliquée |
| 4 | Saidou Gnanado | Benin | Prof Sinsin Brice | Atelier au Jardin Botanique |
| 5 | Delloye Cindy | Belgium | Prof Sinsin Brice | Mémoire sur Projet PIC |
| 6 | Johanssen Jost | Germany | Gnanado Saidou | Développement et Sensibilisation pour l'environnement |
| 7 | Ravon Sebastien | France | Nobimè Georges | Mission éco-volontaire sur les primates |
| 8 | Delour Alexandra | France | Nobimè Georges | Humanitaire : Etude du singe à ventre rouge |
| 9 | Delour Daniel | France | Nobimè Georges | Humanitaire : Etude du singe à ventre rouge |
| 10 | Baur Andreas | Germany | Prof Sinsin Brice | Arpentage/Inondation de la ville de Cotonou |
| 11 | Chasserinaud Dominique | Germany | Prof Sinsin Brice | Recherche : Etude botanique |
| 12 | Houanouke thomas | Benin | Kassa Barthelemy | Politique : Rencontre avec le Chef de l'Etat du Bénin |
| 13 | Behiti Gaston | Benin | Kassa Barthelemy | Politique : Rencontre avec le Chef de l'Etat du Bénin |
| 14 | Bebo Lambert | Benin | Kassa Barthelemy | Politique : audience au palais de la République |
| 15 | Imorou Soumanou | Benin | Kassa Barthelemy | Politique : audience au palais de la République |
| 16 | Bekaté Constant | Benin | Kassa Barthelemy | Politique : audience au palais de la République |
| 17 | Natta Romeo | Benin | Kassa Barthelemy | Politique : audience au palais de la République |
| 18 | Olélé Robert | Benin | Kassa Barthelemy | Politique : audience au palais de la République |
| 19 | Michriki David | France | Nobimè Georges | Mission écologique : Enregistrements des cris d'animaux |
| 20 | Konetché Liamidi | Benin | Nobimè Georges | Mission Planète-Urgence |
| 21 | Aymè Julie | France | Nobimè Georges | Plantation |

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| 22 | Banji Oyun Mathiew | Nigeria | Prof Sinsin Brice | Research collaboration AFORNET |
| 23 | Evêque Frédérique | France | Nobimè Georges | Mission Planète-Urgence : plantation |
| 24 | Jurisch Katrin | Germany | Prof Sinsin Brice | Research SUN: Diversity and dynamic of woody plant populations in a semi-arid savannah in northern-Benin |
| 25 | Gowitzke Jessica | Germany | Prof Sinsin Brice | Research BIOTA |
| 26 | Toguyemì Aboubakar | Benin | Prof Sinsin Brice | Réunion scientifique: Biodiversité et agro écologie |

| N° | Full names of visitors | Provenance | Responsibles in LEA | Topics |
|----|------------------------|--------------|---------------------|--|
| 27 | Coin Emilie | France | Nobimè Georges | Mission éco-volontaire : Suivi des primates |
| 28 | Muret Alexandra | France | Nobimè Georges | Mission éco-volontaire : Suivi des primates |
| 29 | Perroux Denis | France | Nobimè Georges | Mission éco-volontaire : Suivi des primates |
| 30 | Lanoe Benjamin | France | Nobimè Georges | Mission éco-volontaire : Suivi des primates |
| 31 | Launay Olivier | France | Nobimè Georges | Mission éco-volontaire : Suivi des primates |
| 32 | Atungwu Jonathan | Nigeria | Kindomihou Valentin | Research in organic agriculture |
| 33 | Sheku Max-Kanteh | Sierra Leone | Kindomihou Valentin | Research in organic agriculture |
| 34 | Kehinde Lawrence | Nigeria | Kindomihou Valentin | Training in organic agriculture |
| 35 | Kallon Ibrahim | Sierra Leone | Kindomihou Valentin | Training in organic agriculture |
| 36 | Mareike Hirschfeld | Germany | Nago Gilles | Mosquito larvae interaction with tadpoles |
| 37 | Ouédraogo Amadé | Burkina-Faso | Glèlè Kakaï Romain | Postdoc research In Biological data Analysis |