

# Curriculum Vitae

## Prof. Dr. Romain GLELE KAKAI

Full Professor in Biostatistics and Forest estimations (CAMES)  
Head of the Laboratory of Biomathematics and Forest Estimations  
President of the scientific council of Agronomic sciences  
Coordinator of the Doctoral training in Biostatistics  
Faculty of Agronomic Sciences (FSA), University of Abomey-Calavi (UAC)

### PERMANENT ADDRESS

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### EDUCATION

Doctor in Biometry (The highest distinction with congratulations)  
Gembloux Agricultural University, Belgium, 2005.  
MSc in Biometry (Graduated First)  
Gembloux Agricultural University, Belgium, 2001  
Engineer Degree in Forestry (Graduated First)  
Faculty of Agronomic Sciences, University of Abomey-Calavi, 2000.  
Bachelor Degree in Agronomy (Graduated First)  
Faculty of Agronomic Sciences, University of Abomey-Calavi, 1998.

### INTERNATIONAL PRIZES

PRIZE “Heinz and Johannes”. Best research paper in Ecology; 2007 edition. The Support Africa International Foundation, Germany, 2007.  
PRIZE “Jan Tinbergen”. Best young statistician from emerging and developing countries. The International Statistical Institute (ISI), Australia, 2005.  
PRIZE “Biométrie 88”. Best young French biometrician in Belgium. National Association of French Belgian biometricians, Belgium, 2002.

### INTERNATIONAL DISTINCTIONS

Member of Advisory committee of AGNES (African-German Network of Excellence in Science), 2015.  
Member of the Global Young Academy of Sciences, 2012.  
Member of The World Academy of Sciences (Young affiliate), 2011-2015.  
“Young scientists” for the World Economic Forum (Annual meeting of the new champions 2012).  
Fellow of the Alexander von Humboldt Foundation for outstanding achievements in research. Germany, 2007.

## INDIVIDUAL RESEARCH GRANTS

1. TWAS (Third World Academy of Sciences), 2011;
2. RSG Foundation (England), 2008;
3. Wild Idea Foundation (USA), 2008;
4. Alexander von Humboldt Foundation, 2007;
5. GTZ-PROCGRN-BENIN, 2007;
6. TWAS (Third World Academy of Sciences), 2006;
7. GTZ-PROCGRN-BENIN, 2006;
8. IFS (International Foundation for Sciences), 2006;
9. AFORNET, 2005; 11. IFS (International Foundation for Sciences), 2003;
10. GTZ-PROCGRN-BENIN, 2003 ;
11. AUF (Agence Universitaire de la Francophonie), 2002;
12. ANAFE/ICRAF, 1999. Many national grants.

## COLLABORATIVE RESEARCH PROJECTS

1. **TREE FOOD.** Enhancing nutritious food availability through promotion of native edible tree/shrub species in Sub-Saharan Africa (Bénin, Burkina Faso, Niger, Mali). Period: 2017-2019
2. **OSFACO.** Setting up a system of evaluation of the land use dynamics and follow up indicators of the transboundary biosphere reserve of the Mono (Togo, Bénin). 2017-2018.
3. **MANGROVES.** Vers une gestion durable des mangroves au Bénin: dynamique spatio-temporelle, biodiversité, usages et gestion locale, capacité de séquestration de carbone et impacts des changements climatiques. Project coordinator. Period: 2016-2018.
4. **SCOPA.** Organic Cotton for Employment, Growth and Environment? (Organic cotton) I'm senior researcher in the project. Period: 2015-2018. Member of the steering committee of the project.
5. **BIOCEL.** Biologie de la Conservation et Ethnopharmacologie des Ligneux médicinaux de la pharmacopée béninoise. Period : 2016-2018.
6. **CORAF/WECARD.** Sustainable improvement of the productivity of meat value chain (SIMPROMEAT) for food security in West Africa. Senior researcher in the Project. Period: 2014-2016.
7. **CORAF/WECARD.** Amélioration de la résilience aux changements climatiques des écosystèmes agricoles le long des bassins-versants par le développement participatif de systèmes agroforestiers anti-érosifs et fertilisants dans six pays ouest africains. (AmeRCAF). Associate coordinator for Benin. Period: 2013-2015.
8. **WEAMU.** Projet d'harmonisation des méthodes d'étude de la flore et de la végétation en Afrique de l'Ouest. ECOWAS (Economic Community of West African States), Coordinator for the whole project. Period: 2012-2014.
9. **AFRICAN UNION.** Projet de mise au point de technologies de production et d'utilisation durables de biocarburant de *Jatropha curcas* pour une réduction de la pauvreté rurale en Afrique de l'Ouest. Associate coordinator in Benin. Period: 2012-2015.
10. **UNIVERSITY OF ABOMEY-CALAVI (BENIN).** Les palmiers sauvages du Bénin: utilisation, biodiversité, écologie, importance économique, et conservation, 2012. I'm Senior researcher in the project. Period: 2012-2015.

## **AFFILIATION**

Member of the selection committee of the International Climate Protection Fellowship Programme, 2017

Member of Advisory committee of AGNES (African-German Network of Excellence in Science), 2015.

Member of the Global Young Academy of Sciences, 2012.

Vice-chair of national administrative boards for the development of maize culture in Republic of Bénin, 2012.

Member of The World Academy of Sciences (Young affiliate), 2011.

Statistical Pan African Society (SPAS), 2009

Elected-Member of the International Statistical Institute (ISI, the Netherlands), 2005.

African Forestry Research Network, 2004.

## **RESEARCH INTEREST**

- Linear and Generalized linear mixed effect models ;
- Empirical performance of common components and specific weights;
- E-M Algorithms and its variants in non linear models ;
- Ecology and management of mangroves ;
- Development and harmonization of efficient forest inventory designs in West Africa
- Non timber forest products;
- Modeling of structure and dynamics of forest species populations in Benin

## **PROFESSIONAL EXPERIENCE**

Biometrician, National Institute of Agricultural Research of Bénin, 2002-2007

Biometrician (Part time job), Africa Rice Centre, 2006-2008

Junior Professor, University of Abomey-Calavi, 2007-2008

Senior lecturer, University of Abomey-Calavi, 2009-2010

Associate Professor, University of Abomey-Calavi, 2011-2014

Full Professor, University of Abomey-Calavi, 2015-

Coordinator of the Doctoral training in Biostatistics, University of Abomey-Calavi, 2013-

## **LECTURE IN OTHER WEST AFRICAN UNIVERSITIES**

1. University of Abdou Moumouni, **NIGER**; Faculty of Sciences, NIGER. Contact person: Prof. Bakasso Yacoubou. BP 10662 Niamey Niger. E-mail: bakasso@yahoo.com. Phone: +227 90381418. Lecture in Biostatistics for MSc Students.
2. University of Kara; Faculty of Sciences, **TOGO**. Contact person: Prof. Baba Gnon. Email: gnonbaba@yahoo.fr. Lecture in Linear models for BSc students in statistics.
3. Kwame Nkrumah University of Science and Technology (KNUST), **GHANA**. Contact person: Dr. Wilson Agyei Agyare. Email: wagyare@yahoo.co.uk. Lecture in Univariate statistical methods, Multivariate statistical methods and time series analysis for PhD Students.
4. Higher National Agronomy and biotechnology Institute (**GABON**). Lecture in Experimental designs for engineer degree students in agronomy. Contact person: Prof. Kumulungui Brice Serge. Email: kumulungui@yahoo.fr

6. Wascal's GRP-Climate Change and Biodiversity, University Félix Houphouët Boigny (COTE D'IVOIRE). Lecture in sampling techniques and experimental designs for PhD students in Natural resources and climate change. Contact Person: Prof. Kone Daouda. Email: daoudakone2013@gmail.com

## SCIENTIFIC PUBLICATIONS (4 books and 167 scientific papers)

### Books

1. **Glele Kakaï R.** (2010). Règles de classement et taux d'erreur en analyse discriminante. Edition Européenne Universitaire, Allemagne, 237p.
2. **Glele Kakaï R.,** Sodjinou E., Fonton H. N. (2006). Conditions d'application des méthodes statistiques paramétriques. Bibliothèque Nationale, Bénin, 106 p.
3. **Glele Kakaï R.,** Palm R., Kokode G. (2005). L'analyse discriminante décisionnelle: aspects théoriques et applications sur ordinateur. Bibliothèque Nationale, Bénin, 64 p.
4. **Glele Kakaï R.,** Kokode G. (2004). Techniques statistiques univariées et multivariées: applications sur ordinateurs. Bibliothèque Nationale, Bénin, 67 p.

### Scientific papers

#### Year 2017

1. Gbedomon, R. C., Salako, V. K., Adomou, A. C., **Glèlè Kakaï, R.,** & Assogbadjo, A. E. (2017). Plants in traditional home gardens: richness, composition, conservation and implications for native biodiversity in Benin. *Biodiversity and Conservation*. DOI 10.1007/s10531-017-1407-8.
2. Goussanou, C. A., Tente, B. A., Akouehou, G., Salako, V. K., **Glele Kakaï, R. L.,** & Sinsin, B. A. (2017). Structural and spatial patterns of *Isoberlinia* species in a disturbed community forest (Benin, West Africa). *Kastamonu Üniversitesi Orman Fakültesi Dergisi*, 17(2): 225-237.
3. Dayou, E. D., Zokpodo, K. L. B., **Glèlè Kakaï, L. R.,** & Ganglo, C. J. (2017). Impacts of the conventional tillage tools and reduced tillage on the soil fertility preservation: critical review. *Journal of Applied Biosciences*, 117: 11684-11695.
4. De souza, J. F., Gbemavo, D. S. J. C., Gnangle, P. C., Azontonde, A., Chabi adjobo, M. A., Behingan, M. B., **Glele Kakaï, R.** (2017). Effet du pourghère (*Jatropha curcas* L.) Sur la performance agronomique du maïs (*zea mays* L.) Et du manioc (*manihot esculenta crantz*) et sur la fertilité du sol au sud-bénin. *Annales des sciences agronomiques* 21 (2): 223-245.
5. Gbedomon, R.C., Salako, V.K., Fandohan, A.B., Idohou, A.F.R., **Glèlè Kakaï, R.,** Assogbadjo, A.E. (2017). Functional diversity of home gardens and their agrobiodiversity conservation benefits in Benin, *West Africa*. *Journal of ethnobiology and ethnomedicine*. DOI 10.1186/s13002-017-0192-5.
6. Sèwadé, C., Azihou, A. F., Fandohan, A. B., **Glèlè Kakaï, R.,** Mensah, G. A., & Houinato, M. R. B. (2017). Leaf biomass modeling, carrying capacity and species-specific performance in aerial fodder production of three priority browse species *Azelia africana*, *Pterocarpus erinaceus* and *Daniellia oliveri* in Benin. *Livestock Research for Rural Development*, 29, 10.
7. Sèwadé, C., Lokonon, B.E., Azihou, A.F., Akouèhou, G.S., Mensah, G.A., **Glèlè Kakaï, R.,** & Houinato, M.R.B. (2017). Use diversity and farmer's preference of 48 local multipurpose fodder trees: a comparative analysis of three sociolinguistic groups of Benin. *Annales des sciences agronomiques* 22(1): 33-52.

8. Sèwadé, C., Lokonon, B.E., Azihou, A.F., Akouèhou, G.S., Mensah, G.A., **Glèlè Kakai, R.**, & Houinato, M.R.B. (2017). Use diversity and farmer's preference of 48 local multipurpose fodder trees: a comparative analysis of three sociolinguistic groups of Benin. *Annales des sciences agronomiques* 22(1) : 33-52.
9. Salako, V.K., Houéhanou, T.T., Yessoufou, K., Assogbadjo, A.E., Akoègninou, A. & **Glèlè Kakai R.** (2017). Patterns of elephant utilization of *Borassus aethiopum* Mart. and its stand structure in the Pendjari National Park, Benin, *West Africa, Tropical Ecology* 58(2): 1–13.
10. Inoussa, M. M., Padonou, E. A., Lykke, A. M., **Glèlè Kakai, R. G.**, Bakasso, Y., Mahamane, A., & Saadou, M. 2017. Contrasting population structures of two keystone woodland species of W National Park, Niger. *South African Journal of Botany*, 112: 95-101.
11. Lokonon, B. E., Mangamana, E. T., **Glèlè Kakai, R. G.**, & Sinsin, B. (2017). Assessing local conservation priorities of useful woody species within agroforestry systems along Ouémé catchment in Benin (West Africa). *Ethnobiology and Conservation*, 6.
12. Savi, M. K., Mangamana, E. T., Deguenon, J. M., & C. Hounmenou, **R. Glele Kakai** (2017). Determination of Lethal Concentrations Using an R Software Function Integrating the Abbott Correction.
14. Houndonougbo, J. S., Salako, V. K., Idohou, R., Azihou, F. A., Assogbadjo, A. E., & **Glèlè Kakai, R. G.** (2017). Local perceptions of interactions between elephants and *Borassus aethiopum* Mart.(Arecaceae) in the Pendjari National Park in Benin. *Bois et forêts des tropiques*, (331) :33-43.
15. Vihotogbé, R., Watson, C., **Glèlè Kakai R.**, Wichern, F., Sinsin, B. and Gebauer, J. (2017). Effects of salinity on seedling emergence and early seedling growth of *Irvingia gabonensis* (Irvingiaceae). *Seed Sci. & Technol.*, 45(2): 1-14.
16. Mensah S., Veldtman R., Assogbadjo A. E., Ham C., **Glèlè Kakai R. G.** & Seifert T. (2017). Ecosystem service importance and use vary with socio-environmental factors: A study from household-surveys in local communities of South Africa. *Ecosystem Services*, 23: 1-8. DOI: 10.1016/j.ecoser.2016.10.018.
17. Asamoah-Boaheng M., Adebajji A., & **Glèlè Kakai R.** (2017). Small population size and large dimension performance of some equal mean discrimination functions. *International Journal of Mathematics and Statistics* 18(1): 77-86.
18. Paräiso A. ,Paräiso G., Salako V. K., Abiola W., Kelomey A., **Glèlè Kakai, R. G.**, Eдорh P. A., Baba-Moussa L., Sanni A. & Glitho A. I. (2017). Compliance of the Morphometric Characteristics of Bees in Benin with Those of *Apis mellifera* Adansonii. *Journal of Entomology* 14: 24-32.
19. Assogbadjo A. E., Mensah S. & **Glèlè Kakai R. G.** (2017). The relative importance of climatic gradient versus human disturbance in determining population structure of *Azelia africana* in West Africa. *Southern Forests*. DOI: 10.2989/20702620.2016.1255406.
20. Gandji K., Salako K.V., Assogbadjo A. E., Orekan V. OA, **Glèlè Kakai R. G.**, Sinsin B. A. 2017. Evaluation of the sustainability of participatory management of forest plantations: The case study of Wari-Maró Forest Reserve, Benin. *Southern Forests*. DOI: 10.2989/20702620.2016.1255409.
21. Savi M. K., Dossou-Yovo E. R., **Glèlè Kakai R.** (2017). Monte Carlo Simulations for Assessing the Performance of Permutation of Residuals Methods in One-way ANOVA. *Turkiye Klinikleri J Biostat.* 9(3):188-96.

## Year 2016

23. Gbedomon R. C., Assogbadjo A.E., Salako V.K., Fandohan A.B., **Glèlè Kakaï R.** (2016). Exploring the spatial configurations of home gardens in Benin. *Scientia Horticulturae* 213:13–23. DOI:10.1016/j.scienta.2016.10.020
24. Mensah S., Houehanou T., D. Assogbadjo A., **Glele Kakaï R.** (2016). Latitudinal variation in the woody species diversity of *Azelia africana* Sm. habitats in West Africa. *Tropical ecology* 57(4): 1-10.
25. **Glèlè Kakaï R.** (2016). Effectiveness of inventory plot patterns and spatial distribution of trees and recruits in West African forest estimates: Recent findings and perspectives. *RUFORUM Working Document Series* 14(1): 497-506.
26. Mensah S., Veldtman R., Assogbadjo A., **Glèlè Kakaï R.**, Seifert T. (2016). Tree species diversity promotes aboveground carbon storage through functional diversity and functional dominance. *Ecology and Evolution*. DOI: 10.1002/ece3.2525.
27. Agbahounga S., Assogbadjo A., Chadare F. J., Idohou R., Salako S. K., Agoyi E.E., **Glèlè Kakaï R.** (2016). Ecological diversity and conservation of wild edible fruit tree species in the lama forest reserve in Benin. *Bois et forêts des tropiques* 329(3): 53-65.
28. **Glèlè Kakaï R.** (2016). Strengthening capacity building in data analysis in West African Universities and research institutions: A three-year experience of the Master programme in Biostatistics at the University of Abomey-Calavi, Benin. *African Journal of Rural Development*, Vol. 1(3): 2016: pp. 253 – 259.
29. Sinasson K.S.G., Shackleton C.M., **Glèlè Kakaï R.**, And Sinsin B. (2016). Forest degradation and invasive species synergistically impact *Mimusops andongensis* (Sapotaceae) in Lama Forest Reserve, Benin. *Biotropica*. DOI: 10.1111/btp.12370
30. Idohou R., Peterson A.T., Assogbadjo A.E., Vihotogbe R.L., Padonou E. and **Glèlè Kakaï R.** (2016). Identification of potential areas for wild palm cultivation in the Republic of Benin through remote sensing and ecological niche modeling. *Genetic Resource Crops Evolution*. DOI 10.1007/s10722-016-0443-7
31. Gbedomon R.C., Salako V.K., Chadare F.J., **Glele Kakaï R.** And Assogbadjo A.E. (2016). Gendered motivation for home gardening and maintenance of Agrobiodiversity: a case study in Benin, West Africa. *Annales des sciences agronomiques* 20 (2) : 93-106.
32. Donou M.T., Houehanou T., Assogbadjo A.E., **Glele Kakaï R.** And Agbangla C. (2016). Use of *Raffias*' species (*Raphia* spp.) and its impact on socioeconomic characteristics of harvesters in Benin (West Africa). *International Journal of Biomolecules and Biomedicine*, Vol. 5, No. 1, p. 1-19, 2015
33. Akpona T.J., Idohou R Assogbadjo A.E., Salako V.K. And **Glèlè Kakaï R.** (2016). History, Impact of Soil Types on Stand Structure and Growth of the Dry Zone Mahogany (*Khaya senegalensis* (Desr.) A.Juss.) in Plantation in Benin (West Africa). *Environment and Ecology Research* 4(4): 193-199, (2016), DOI: 10.13189/eer.(2016).040402
34. Mensah S., **Glele Kakaï R.**, Seifert T. (2016). Patterns of biomass allocation between foliage and woody structure: the effects of tree size and specific functional traits. *Annals of Forest Research*. DOI: 10.15287/afr.(2016).458.
35. Mensah S., Veldtman R., Du Toit B., **Glele Kakaï R.**, Seifert T. (2016). Aboveground Biomass and Carbon in a South African Mistbelt Forest and the Relationships with Tree Species Diversity and Forest Structures. *Forests*. DOI: 10.3390/f7040079.
36. Pomalegni S.C.B., Gbemavo D.S.J.C., Kpade C.P., Babatoundé S., Chrysostome C.A.A.M., Koudandé O.D., Kenis M., **Glèlè Kakaï R.**, Mensah G.A. (2016). Perceptions et facteurs déterminant l'utilisation des asticots dans l'alimentation des poulets locaux (*Gallus gallus*) au Bénin. *Journal of Applied Biosciences* 98:9330 – 9340.

37. Atidegla Sc., Huat J., Agbossou E.K., Saint-Macary H., **Glele Kakaï R.** (2016). Vegetable Contamination by the Fecal Bacteria of Poultry Manure: Case Study of Gardening Sites in Southern Benin. *International Journal of Food Science*.
38. Idohou R., Azihou F., Adomou A., Assogbadjo A.E., **Glèlè Kakaï R.L.** (2016). Influence of the landscape context on stand structure and spatial patterns of the doum palm (*Hyphaene thebaica*) in the Republic of Benin (West Africa). *Agroforest Syst.* DOI 10.1007/s10457-016-9920-4.
39. Camara M., Gbemavo C.D.S.J., Salako V.K., Kouame F.N., Sambou B., **Glèlè Kakaï R.L.** (2016). Woody plant species diversity in the last wild habitat of the Derby Eland (*Taurotragus derbianus derbianus* Gray, 1847) in Niokolo Koba National Park, Senegal, West Africa. *International Journal of Biodiversity and Conservation* 8(2): 32-40.
40. Gbedomon C.R., Floquet A., Mongbo R., Salako K.V., Fandohan A.B., Assogbadjo A.E., **Glèlè Kakaï R.** (2016). Socio-economic and ecological outcomes of community based forest management: A case study from Tobé-Kpobidon forest in Benin, Western Africa. *Forest Policy and Economics*. 46–55
41. Mensah S., Assogbadjo A.E., Salako V.K., Ago E.E., **Glèlè Kakaï R.** (2016). Accounting for tree spatial distribution in a comparison of plot sizes and shapes in dense forest and woodland in Benin (West Africa). *African Journal of Ecology*. DOI: 10.1111/aje.12269. 87–94.
42. **Glèlè Kakaï R.**, Salako V.K., Lykke A.M. (2016). Techniques d'échantillonnage en étude de végétation *Annales des Sciences Agronomiques 20 – Spécial Projet Undesert-UE: 1-13*.
43. **Glèlè Kakaï R.**, Bonou W., Lykke A.M. (2016). Approche méthodologique de construction et d'interprétation des structures en diamètre des arbres. *Annales des Sciences Agronomiques 20 – Spécial Projet Undesert-UE:99-112*.
44. **Glèlè Kakaï R.**, Lykke A.M. (2016). Aperçu sur les méthodes statistiques univariées utilisées dans les études de végétation. *Annales des Sciences Agronomiques 20 – Spécial Projet Undesert-UE : 113-138*.
45. **Glele Kakaï R.**, Salako V.K., Padonou E.A., Lykke A.M. (2016). Méthodes statistiques multivariées Utilisées En Écologie. *Annales des Sciences Agronomiques 20 – Spécial Projet Undesert-UE : 139-157*.
46. Thiombiano A., **Glele Kakaï R.**, Bayen P., Boussim J.I. Mahamane A. (2016). Méthodes et dispositifs d'inventaires forestiers en Afrique de L'ouest : État des deux et propositions pour une harmonisation. (2016). *Annales des Sciences Agronomiques 20 – Spécial Projet Undesert-UE: 15-31*.
47. Pomalegni S.C.B., Babatounde S., **Glele Kakaï L.R.**, Mensah G.A. (2016). Synthèse bibliographique sur l'alimentation, la consommation et la digestibilité alimentaire chez le grand aulacode (*Thryonomys swinderianus*). *Annales des sciences agronomiques* 19(2): 401-417.
48. Donou Hounsode M.T., Assogbadjo Achille E. Houehanou T., **Glele Kakaï R. L.**, Agbangla C. (2016). Facteurs socio-économiques influençant l'usage des raphias au Bénin (Afrique de l'ouest). *Revue Cames*, 4(1):6-21.
49. Hounkpevi A., Tosso F., Gbemavo D.S.C., Kouassi E.K., Kone D., **Glele Kakaï R.** (2016). Climate and potential habitat suitability for cultivation and in situ conservation of the black plum (*Vitex doniana* Sweet) in Benin, West Africa. *International Journal of Agronomy and Agricultural Research* 8(4): 67-80.
50. Hounkpevi A., Azihou A.F. Kouassi E.D.K., Porembski S., **Glele Kakaï R.** (2016). Climate-induced morphological variation of black plum (*Vitex doniana* Sw.) in Benin, West Africa. *Genet Resour Crop Evol.* DOI 10.1007/s10722-016-0409-9.

51. Idohou R. Assogbadjo A.E., **Glèlè Kakai R.**, Peterson A. T. (2016). Spatio-temporal dynamic of suitable areas for species conservation in West Africa: eight economically important wild palms under present and future climates. *Agroforest Systems*. DOI:10.1007/s10457-016-9955-6.

## Year 2015

52. Pomalegni S.C.B., Babatounde S., Glele Kakai L. R., Mensah G. A. (2015). Synthèse bibliographique sur l'alimentation, la consommation et la digestibilité alimentaire chez le grand aulacode (*Thryonomys swinderianus*). *Annales des sciences agronomiques* 19(2) volume spécial: 401-417.
53. Amagnide A.G., Salako V., Donou Hounsode M., Sinsin F., Orékan V., Dan C., **Glèlè Kakai R.** (2015). Ecological consequences of anthropogenic pressure in Wari-Marô Forest Reserve (Benin, West Africa). *Journal of Agriculture and Environment for International Development*, 109(2): 271-289.
54. Gbemavo D. S. J. C., Gandji K., Gnangle P. C., Assogbadjo A. E., Sokpon N., Glele Kakai R. L. (2016). Adaptation écologique et modélisation du rendement du *Jatropha curcas* L. en fonction des caractéristiques morphologiques le long d'un gradient climatique. *Agronomie Africaine* 27 (3) : 201 – 211.
55. Salako K., Azihou A.F., Assogbadjo A.E., Houehanou H.T., Kassa B. **Glele Kakai R.** (2015). Elephants-induced damage drives spatial isolation of the dioecious palm *Borassus aethiopicum* Mart. (Arecaceae) in the Pendjari National Park, Benin. *African journal of ecology*. DOI: 10.1111/age.12253.
56. Sinsin F., **Glele Kakai R.**, Orthmann B., Sinsin B. (2015). Tree-ring: a suitable implement for spatial and temporal fire distribution analysis in savanna woodland and dry forest. *Journal of Forestry Research*. DOI 10.1007/s11676-015-0047-7.
57. Agoyi E. E. Padonou E. A., Amoussa W., Assogbadjo A.E., **Glele Kakai R.**, Sinsin B. (2015). Morphological variation, cultivation techniques and management practices of *Moringa oleifera* in Southern Benin (West Africa). *International Journal of Agronomy and Agricultural research* 6(3):97-105.
58. Padonou Ea., Assogbadjo Ae., **Glele Kakai R.**, Lykke Am., Sinsin B., Axelsen J. (2015). Investigations of on farm seedling productivity of the rare and declining *Caesalpinia bonduc* in Benin (West Africa) by aid of simulation modelling. *International Journal of Agronomy and Agricultural research* 6(3):116-131.
59. Padonou E.A., Ahossou O.D., Okou F.O.Y., Assogbadjo A.E., **Glele Kakai R.**, Lykke A. M., Sinsin B. (2015). Impact of climate on seed morphology and plant growth *Caesalpinia bonduc* L. in West Africa. *International Journal of Agronomy and Agricultural research* 6(3):86-96.
60. Donou Hounsode M., **Glele Kakai R.**, Azihou F., Ouedraogo A. (2015). Efficiency of inventory plots patterns for the estimation of woody vegetation recruits density in a tropical dense forest. *African journal of ecology*: 53, 355–361.
61. Gnonlonfoun I., **Glele Kakai R.**, Salako V.K., Assogbadjo A.E., Ouédraogo A. (2015). Structural analysis of regeneration in tropical dense forest: combined effect of plot and spatial distribution patterns. *Acta botanica gallica* 162(1): 79-87.
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## Year 2006

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## Year 2005

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## Year 2003

166. **Glèlè Kakai R.**, Piraux F., Fonton N, Palm R. (2003). Comparaison empirique des estimateurs de taux d'erreur en analyse discriminante, *Rev. Stat Appl.* 51 (2) : 91-104.

## Year 2002

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## SELECTED COMMUNICATIONS AND SYMPOSIUMS

1. Abiola A.W., Paraiso A., Salako K.V., **GLÈLÈ KAKAÏ R.L.** (2014). Caractères morphométriques les plus discriminants des abeilles du Bénin. 16<sup>ème</sup> édition des Journées Scientifiques Internationales de Lomé, 20-25 Octobre 2014. Lomé, Togo.
2. Idohou R., Assogbadjo A.E., **GLÈLÈ KAKAÏ R.** (2014). Predicting suitable environments, potential occurrences of Wild edible palm trees and effectiveness of their conservation in protected areas in West Africa. 16<sup>ème</sup> édition des Journées Scientifiques Internationales de Lomé, 20-25 Octobre 2014. Lomé, Togo.
3. Abiola A.W., Paraiso A., Salako K.V., **GLÈLÈ KAKAÏ R.L.** (2014). Caractères morphométriques les plus discriminants des abeilles du Bénin. 16<sup>ème</sup> édition des Journées Scientifiques Internationales de Lomé, 20-25 Octobre 2014. Lomé, Togo.
4. Salako V.K., Houéhanou T., Yessoufou K., Akoègninou A., Assogbadjo A.E., **GLÈLÈ KAKAÏ R.L.** (2014). Impact of elephants (*Loxodonta africana*) pressure on the functional diversity of *Borassus aethiopum* (Arecaceae) in the Pendjari National Park, Benin. 16<sup>ème</sup> édition des Journées Scientifiques Internationales de Lomé, 20-25 Octobre 2014. Lomé, Togo.
5. Akpona J.D.T., Akpona H.A., **GLÈLÈ KAKAÏ R.**, Sinsin B. (2014). Assessment of current woody species and potentially candidate for forest exploitation: implication for reforestation system improvement in Benin. 24<sup>th</sup> World Congress of the International Union of Forest Research Organization (IUFRO), 5-11<sup>th</sup> October 2014. Salt Lake City, USA.
6. Akpona J.D.T., Akpona H.A., Ayihouenou E.B., **GLÈLÈ KAKAÏ R.**, Sinsin B. (2014). Impact of land use practices on traits and production of Shea Butter Tree (*Vitellaria Paradoxa* C.F. Gaertn.) in Benin. 24<sup>th</sup> World Congress of the International Union of Forest Research Organization (IUFRO), 5-11<sup>th</sup> October 2014. Salt Lake City, USA.
7. Salako V.K., Kènou C., Houéhanou T., Assogbadjo A., **GLÈLÈ KAKAÏ R.** (2014). Impact of traditional agroforestry practices on conservation effectiveness of Non-Timber Forest Products (NTFPs) providing-Trees: case study of *Borassus aethiopum* Mart. (Arecaceae) in Benin. 24<sup>th</sup> World Congress of the International Union of Forest Research Organization (IUFRO), 5-11<sup>th</sup> October 2014. Salt Lake City, USA.
8. Idohou R., Assogbadjo A.E., Agbangla C., Adomou A.C., **GLÈLÈ KAKAÏ R.** (2014). Spatial dynamic of suitable habitat for the neglected and Underutilized *Hyphaene thebaica* Mart. in Benin (West Africa). 1<sup>st</sup> conference of the national network of researchers on neglected and underutilized species in Benin, Abomey-Calavi, 27-28<sup>th</sup> February 2014, Abomey-Calavi, Benin.
9. Salako K.V. Assogbadjo A.E., Adomou A.C., Agbangla C., **Glèlè Kakaï R.** (2014). Abundance and ecology of the threatened, neglected and underutilized palm species *Borassus aethiopum* Mart. in Benin. 1<sup>st</sup> conference of the national network of researchers on neglected and underutilized species in Benin, Abomey-Calavi, 27-28<sup>th</sup> February 2014, Abomey-Calavi, Benin.
10. Idohou R., Assogbadjo A.E., Fandohan B., Gouwakinnou G.N., **Glèlè Kakaï R.**, Sinsin B. & Maxted N. (2013). Biodiversity and Prioritization of the Crop Wild Relatives in Benin. 3<sup>rd</sup> International Conference on neglected and Underutilized Species, 24-27 September 2013. Accra, Ghana.
11. Salako K.V., Fandohan B., Assogbadjo A.E., Chakeredza S., Dullo M.E., **Glèlè Kakaï R.L.** (2013). Home gardens: An assessment of their biodiversity and potential contribution to conservation of threatened species and crop wild relatives in Benin. 14<sup>th</sup> Students Conference on Conservation Science (SCCS-2013), University of Cambridge, 19-21<sup>st</sup> March 2013. Cambridge, UK.

12. Salako K.V., **Glèlè Kakaï R.L.** (2013). Relative performance of non-metric multidimensional scaling in vegetation studies: case study of the Lama Forest Reserve (Benin). 2<sup>nd</sup> Conference on Statistics Applied to Development in Africa (SADA), ISBA, University of Abomey-Calavi, 5-8<sup>th</sup> March 2013. Cotonou, Benin.
13. Salako K.V., **Glèlè Kakaï R.L.** (2013). Utilisation des méthodes multivariées et de rééchantillonnage pour l'estimation de l'erreur de caractérisation floristique de la végétation en forêt dense. 2<sup>nd</sup> Conference on Statistics Applied to Development in Africa (SADA), ISBA, University of Abomey-Calavi, 5-8<sup>th</sup> March 2013. Cotonou, Benin.
14. 10-14 September, 2012: *22nd Annual meeting of the new champions 2012*, The World Economic Forum Tianjin, China.
15. 21-23 November, 2011: *22nd General meeting of the Academy of sciences for the developing world*, Trieste, Italy. Presentation: Estimation of the density of recruitments in tropical dense forest: efficiency of inventory plots patterns.
16. June 2010: *21<sup>st</sup> annual session of The International Environmetric Society (TIES/ISI)*, Margarita Islands, Venezuela with paper presentation on Characterization of the habitat of an endangered species (*Azelia africana* Sm.) in the Lama Forest reserve (Benin, West Africa), 20-25 June, 2010.
17. 20-22 October 2010: *International and interdisciplinary conference on food, medicinal and cosmetic plants in sahelian zones*. Paper presentation: Indigenous knowledge and diversity of wild fruit trees in agroforestry systems of Bénin), Dakar, 20-22 October.
18. August 2009: *57th session of International Statistical Institute (ISI)*, Durban, South Africa with paper presentation on Relative efficiency of non parametric error rate estimators in multi-group linear discriminant analysis, 16 – 22 august, 2009.
19. August 2007: *56th session of International Statistical Institute (ISI)*, Lisboa, Portugal with paper presentation on Data driven choice of a classification rule in discriminant analysis, 22 – 29 august, 2007.
20. April 2005 : *55th session of International Statistical Institute (ISI)*, Sydney, Australia with paper presentation on Relative Performance of Error Rate Estimators in Linear, Quadratic and Logistic Discriminant Analysis, 5 – 12 April, 2005.
21. February, 2005: *100 Year of Agricultural research in Benin*, Niaouli, Benin, with paper presentation: Utilisation des mathématiques et statistiques en agriculture, 14 – 18 February, 2005.
22. May, 2004 : *36ème journées françaises de statistiques*, Montpellier, French, with paper presentation on Performance relative des règles linéaire, quadratique et logistique en analyse discriminante, 24 – 28 may, 2005.
23. July 2002: *21th International Biometric Conference (IBC)*, 2002, Freiburg, Germany, with paper presentation: Error rates estimation in linear discriminant analysis, 21 - 26 July, 2002.

## Theses

1. **GLÈLÈ KAKAÏ R.** (2005). Comparaison empirique des règles de classement et des estimateurs des taux d'erreur en analyse discriminante. PhD thesis. Gembloux Agricultural University, Gembloux, 202p.
2. **GLELE KAKAÏ R.** (2001). Estimation des taux d'erreur en analyse discriminante. MSc Thesis. Gembloux Agricultural University, Gembloux, 73p.
3. **GLELE KAKAÏ R.** (2000). Etablissement d'une table de cubage de *Acacia auriculiformis* au Sud-Bénin, Mémoire d'Ingénieur Agronome, FSA/UAC, Abomey-Calavi, 110 p.

## **COMPUTER SKILL**

Word Processing: Microsoft office (Word, Excel, PowerPoint, FrontPage, Access).

Statistical Software: SAS, Minitab, SPSS, STATISTICA, R, GENSTAT.

Statistical Language: SAS, MATLAB, MINITAB, R.

## **LANGUAGE SKILLS**

Language	Writing	Speaking	Listening
English	2	2	2
French	4	4	4

1 = Fairly good; 2 = Good; 3 = Very good; 4 = Excellent.