

BISMARCK OFOSU-BAMFO

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RESEARCH INTERESTS

Tropical forest ecology, Liana ecology, Phenology, Plant biodiversity conservation, Ecosystem services, ethnobotany, forest ecosystem studies

EDUCATIONAL BACKGROUND

MPhil Ecology (KNUST, Kumasi) completed June, 2017

- Thesis: The Effects of Forest Edge on Liana Communities in Wet Evergreen and Moist Semi-deciduous Forest Ecosystems in Ghana.

BSc. (Hons) Biological Sciences (KNUST, Kumasi) completed August, 2012

- Dissertation: Biocontrol of *Sclerotium rolfsii* and *Fusarium oxysporum* using *Trichoderma harzianum*.

RESEARCH OUTPUT

Journal article

1. Ansah, K. O., Santo, K. G., Adjei, R. R., **Ofosu-Bamfo, B.**, Addo-Fordjour, P., & Obeng-Ofori, D. (2023). Assessment of knowledge and patterns of weedicide and personal protective equipment usage among farmers in some cocoa farming communities in Ghana. *Journal of Agriculture and Food Research*, 100641.
2. Addo-Fordjour, P., **Ofosu-Bamfo, B.**, Mbroh, E., Arnold, C.K., Opoku Boadi, A., Mulberry, M., Doe, D.E.K, Oduro Takyi, E. (2022). Plant invasion drives liana and tree community assemblages and liana-tree community structure in moist semi-deciduous forests in Ghana. *Biological Invasions* <https://doi.org/10.1007/s10530-022-02933-0>
3. **Ofosu-Bamfo, B.**, Addo-Fordjour, P. and Belford, E. J. D. (2022). Edge disturbance shapes liana diversity and abundance but not liana-tree interaction network patterns in moist semi-deciduous forests. *Ecology and Evolution* DOI: 10.1002/ece3.8585
4. Addo-Fordjour, P., Marfo, I., **Ofosu-Bamfo, B.** (2021). Fragmentation drives liana community structure but not the patterns of liana-tree interaction network in two forest ecosystems in Ghana. *Ecological Research* <https://doi.org/10.1111/1440-1703.12258>
5. Addo-Fordjour, P., Antwi Agyei, L., **Ofosu-Bamfo, B.**, Issifu, I. N., Osei, G. O., Appiah-Kubi, R., Bremang, E. K., Koroduah P. O. (2021). Temporal dynamics of liana communities in moist semi-deciduous forests with different management histories in Ghana. *Forest Ecology and Management* <https://doi.org/10.1016/j.foreco.2021.119042>
6. Addo-Fordjour, P., Kadan, F., Rahmad, Z. B., Fosu, D. and **Ofosu-Bamfo, B.** (2020). Wildfire causes shifts in liana community structure and liana-soil relationships in a moist semi-deciduous forest in Ghana. *Folia Geobotanica (1-15)*. DOI 10.1007/s12224-020-09380-6

7. Addo-Forjour, P., **Oforu-Bamfo, B.**, Kwofie, F., Akyea-Bobi, N., Rahman, F. A. and Amoah, E. (2020). Changes in liana community structure and functional traits along a chronosequence of selective logging in a moist semi-deciduous forest in Ghana. *Plant Ecology and Diversity*. DOI: 10.1080/17550874.2019.1675095
8. **Oforu-Bamfo, B.**, Addo-Forjour, P. and Belford, E. J. D. (2019). Does road-edge affect liana community structure and liana host interactions in evergreen rainforests in Ghana? *Acta Oecologica* 101(2019)103476 doi: 10.1016/j.actao.2019.103476

Conference papers

- **Oforu-Bamfo, B.**, Addo-Forjour, P. and Belford, E. J. D. (2020). Does road-edge affect liana community structure and liana host interactions in evergreen rainforests in Ghana? Book of Abstracts of Irish Ecological Society's 3rd Ecology and Evolution Ireland Conference 2021 (page 11).

Non-science communication

1. **Oforu-Bamfo, B. (October 2020)**. Tips on setting up a new phenology research project. (<https://africanphenologynetwork.online/2020/10/13/tips-on-setting-up-a-new-phenology-research-project/>). Accessed on 16th June 2021.
2. **Oforu-Bamfo, B. (September 2020)**. Tagging lianas and vipers. (<https://ofbamlab.wordpress.com/2020/09/21/tagging-lianas-and-vipers/>). Accessed on 16th June 2021.
3. **Oforu-Bamfo, B. (April 2020)**. Setting up field plots. (<https://ofbamlab.wordpress.com/2020/04/13/setting-up-field-plots/>). Accessed on 16th June 2021.

RESEARCH EXPERIENCE

- Phenological monitoring of woody plants (lianas and trees) in three different forest ecosystem types (wet evergreen, moist semi-deciduous and dry semi-deciduous) in Ghana.
- Forest inventory in forests across five distinct forest ecosystem types in Ghana to determine factors that shape liana and tree ecology in Ghana.
- Surveys to determine plant contribution to forest ecosystem services in Ghana.

GRANTS/SCHOLARSHIPS/AWARDS

1. November 2022 - Fast-start funding for joint projects on topics related to Africa by the Universities of Hohenheim and Tübingen on the theme Geo- and Biosphere in Africa: Diversity, Change and Opportunity. Grant Award **10000.00 Euros** for a pilot study on "*Structure-stability relationships in tree-liana interaction networks.*"
 - a. Dr. Korinna Theresa Allhoff, Institute of Biology, University of Hohenheim, Stuttgart, Germany.
 - b. Dr. Sara Tomiolo, Institute of Evolution and Ecology, University of Tübingen, Tübingen, Germany
 - c. **Mr. Bismark Oforu-Bamfo**, External Partner (Africa)

2. July 2022 – Solidarity Scholarship Award (**2000.00 CHF**) to participate in the Transdisciplinary Nature Conservation short course at the University of Lausanne, Switzerland from 12-16 September 2022.
3. July 2021 – International Foundation for Science (IFS) Grant D-6590-1 to investigate *Liana community structure in relation to climatic and edaphic factors across five forest ecosystem types in Ghana*. **Funding amount USD 14511.00**
 - a. Principal Investigator: Bismark Ofofu-Bamfo
 - b. Collaborators: Prof. Patrick Addo-Fordjour, Dr. Ebenezer JD Belford, Prof. Hans Verbeeck, Dr. Sruthi Krishna Moorthy Parvathi
4. March 2021 – The Royal Society of Edinburgh COP 26 grant award to the African Phenology Network for *International networking and research collaboration* ahead of COP26. Funding amount **GBP 10000.00**
 - a. Collaborators: Dr. Emma Bush (PI, Scotland), Robyn Whytock (Investigator, Scotland), **Bismark Ofofu-Bamfo (Lead Investigator, Ghana)**, Herve Memiaghe (Lead Investigator, Gabon), Asenath Adiengi (Lead Investigator, Kenya).
5. August 2020 – IdeaWild Equipment Grant: Binoculars (1), GPS eTrex 10 handheld GPS navigator (1) and diameter tapes (2). Equipment estimated at **USD 400.00**
6. November 2018 – GNPC Foundation Capacity Development Award (2018 – 2021) towards funding of PhD academic fees. **Funding amount USD 10000.00**

WORK (EXPERIENCE IN TEACHING)

Lecturer at the Department of Basic and Applied Biology, School of Sciences, University of Energy and Natural Resource (UENR), Post Office Box, 214, Sunyani (January 2020 – to date).

Course instructor: Principles of Ecology I&II, Vascular Plants (Tracheophyte Systematics), Non-Vascular Plants, Plant Physiology, Plant Metabolism, Plant Growth and Development, Plant Anatomy and Morphology

Assistant Lecturer at the Department of Basic and Applied Biology, School of Sciences, University of Energy and Natural Resource (UENR), Post Office Box, 214, Sunyani (January 2018 – January 2020).

Previously instructed: Cell Structure and Function, Invertebrate Zoology, Population Genetics, Principles of Ecology I&II, Vascular Plants (Tracheophyte Systematics), Non-Vascular Plants, Plant Physiology, Plant Metabolism, Plant Growth and Development, Plant Anatomy and Morphology

Teaching Assistant at the Department of Theoretical and Applied Biology, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi (September 2012 – August 2013).

- Supervised laboratory practical in Plant Morphology and Anatomy, Whole Plant Physiology, Vascular Plants and Non-vascular plants.
- Supervised field practical in Principles of Ecology at the KNUST botanic garden.
- Assessed and graded laboratory and field work.
- Organized tutorials for students and provided general academic guidance and mentorship.

CONFERENCES, SEMINARS AND WORKSHOPS

- Participant, 8th International Canopy Conference, 16th – 19th October, 2023 XTBG, Yunnan China
- Presentation on “Overview of liana research in Africa: Gaps and future directions” at the 1st International Workshop on Liana Forest Ecology, 12th – 15th October 2023 XTBG, Yunnan China
- Presentation on “Liana community structure in relation to climatic, edaphic and physiognomic attributes of forests across five forest ecosystem types in Ghana.” at BioGARD Conference 14-15 September 2023, University of Hohenheim, Germany
- Participant, Transdisciplinary Nature Conservation Summer School organized by UNIL/IUCN in Lausanne, Switzerland from 12-16 September 2022.
- Oral Presentation on “*Phenology of woody climbing plants in Ghana*” at ATBC Conference 2022 organized in Catargena, Columbia. 10-14 July 2022.
- Oral Presentation on “*Phenology of climbing plants in Ghana*” at the African Biometeorology Colloquium. 8th June 2022.
- Oral Presentation on “*Coordinated Phenology Monitoring in Africa*” at the Phenomenal Time Series Online Seminar: Perceiving ecological temporalities organized the College of Art, University of Edinburgh. 3rd February, 2022.
- Participant, International Congress of Biometeorology, 20th to 23rd September 2021.
- Oral presentation on “*African Phenology Network*” at International Society of Biometeorology (ISB) General Phenology Commission Meeting. 20th September, 2021.
- Oral presentation on “*Introduction to phenocams (initial feedback on equipment, logistics and use in the field)*” at African Phenology Network Workshop on Evidence for Africa-wide phenology monitoring. 10th September, 2021.
- Co-chair, African Phenology Network Workshop on Lessons from International Phenology Networks (Online). 30th July, 2021.
- Oral presentation on “*Perspectives on emerging phenology research and use of new technologies*” at African Phenology Network Workshop on the theme: African Perspectives on Phenology Monitoring (Online). 25th June 2021.
- Video Poster Presentation on “*Road-edge effects on liana community structure and liana host interactions*” at the Irish Ecological Society’s 3rd Ecology and Evolution Ireland Conference from 7th to 8th January, 2021.
- Poster Presentation on “*Use of KoboCollect data kit for phenological observation in a moist forest in Ghana*” at BES Twitter Conference (TropiCon20) under the theme Advances in Technology and Innovative Methods. Date 5th to 6th November 2020
- Participant, Online Interactive Grantsmanship Training organized by The African Population and Health Research Center (APHRC) and NIHR-Wellcome Global Health Research Partnership on 29th July, 2020.
- Participant, Mini workshop: Building Next-Generation Data Infrastructure for Plant Phenology by USA National Phenology Network held online via zoom platform, 15th June, 2020
- Participant, European Geosciences Union Phenology Conference 2020 held online via Lynx on 8th May, 2020.
- Mentee, Association for Tropical Biology and Conservation Mentorship Program (August

2019 – July 2020)

- Participant, Workshop on Research Design for Scientific Field Research at the Dept. of Theoretical and Applied Biology, KNUST – Facilitated by Prof. Eric Wiener, Associate Professor of Environmental Science, Ramapo College of New Jersey, USA (26th May to 1st June 2017).
- Participant, Office of Grants and Research (OGR), KNUST, Kumasi - Training on “Avoiding pitfalls in writing for grants and administering research projects.” (29th to 30th June, 2017).
- Participant, Training in Advocacy and Policy Influencing, MDF West Africa at Larteh, Ghana (6th to 7th July, 2017) organized by Tropenbos Ghana and Forest Watch Ghana.
- Participant, International Forest Governance Forum, Yaoundé, Cameroun (20th to 24th October 2014).
- IAESTE Internship Training, University of Applied Science Wihenstephan – Triesdorf (HWST), Friesing, Germany (1st June to 31st August 2014).
- Training in Auditing Timber Legality Assurance Systems facilitated by CIDT/University of Wolverhampton, organised in Takoradi, Ghana (5th to 16th August 2013).

EDITORIAL AND MANUSCRIPT REVIEW EXPERIENCE

- Section Editor, Journal of Energy and Natural Resource Management
- Reviewer, Journal of Tropical Ecology
- Reviewer, Plant Ecology
- Reviewer, Basic and Applied Ecology

MANAGEMENT AND ADMINISTRATIVE RESPONSIBILITIES

- Grants and Research Coordinator, Department of Biological Science, School of Science, University of Energy and Natural Resources, Sunyani
- Chairman, School of Sciences Sports Committee, School of Science, University of Energy and Natural Resources, Sunyani (2022/2023 Academic Year).
- Exam Officer, Department of Basic and Applied Biology (July 2020 to January 2022)
- Industrial Attachment Coordinator, Department of Basic and Applied Biology (July 2020 to January 2021)
- Undergraduate thesis supervisor for a total of 38 undergraduate students since 2021.
- Academic counsellor (February 2018 to date).

RELEVANT ANALYTICAL SKILLS

- Proficient in statistical analysis and software (PAST and SPSS).
- Proficient in Microsoft office suite (Word, Excel and PowerPoint).
- Intermediate user in R programming.
- Proficient in the design and use of open data kits (ODK) for data collection and data entry.
- Proficient in the use of search engines to gather academically relevant data, journals, books and other resources.

MEMBERSHIPS AND AFFILIATIONS

- Member, African Phenology Network (APN)
- Member, APN Steering Committee
- Member, Africa Chapter of Association for Tropical Biology and Conservation (ATBC)
- Member, Ghana Science Association
- Member, IAESTE Alumni

OTHER INFORMATION

- Key Personal Attributes: Diligent and Goal-oriented
- Proficient user of the English Language

REFERENCES

- 1. Dr. Kenneth Bentum Otabil, Lecturer (and Head of Department)**
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- 2. Dr. Ebenezer J. D. Belford, Senior Lecturer**
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- 3. Prof. Patrick Addo-Fordjour, Associate Professor of Tropical Forest Ecology**
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Cell Phone: +233 501348803
- 4. Prof. Hans Verbeeck, Professor of Applied Ecology**
CAVElab Computational & Applied Vegetation Ecology,
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