# Barnabas H. Daru, PhD

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## PROFESSIONAL APPOINTMENTS

2018-	<b>Assistant Professor &amp; Herbarium Curator</b> , Texas A&M University Corpus Christi, Texas.
2018-	Harvard University Herbaria Research Associate, Harvard University.
2016-18	Harvard University Herbaria Postdoctoral Fellow, Harvard University.
2014-16	Lecturer and Herbarium Curator, University of Pretoria, South Africa.
2010-14	Research Assistant Plant Diversity, University of Johannesburg, South Africa.
2005-07	Intern: A. P. Leventis Ornithological Research Institute, Nigeria.

## **EDUCATION**

2016-18	Postdoctoral Fellow, Harvard University
	Project: Extinction risk, biotic interactions and phenological diversity using herbarium records.
	Faculty Mentor: Prof Charles Davis, Harvard University.

- 2012-15 **Ph.D. in Botany**, University of Johannesburg, South Africa Dissertation: *An evaluation of the phylogenetic diversity of trees in southern Africa*. Advisors: Prof Michelle van der Bank and Prof T. Jonathan Davies.
- 2010-12 M. Sc. in Botany, University of Johannesburg, South Africa
- 2003-07 **B.Sc. Hons**, University of Jos, Nigeria

## Grants and Fellowships (Total = \$1,314,792)

2021-23	NSF DBI ( <b>Lead PI</b> ), Collaborative Research: phyloregion, computational infrastructure for biogeographic regionalization and macroecology in the R computing environment (\$585,050)
2022-24	Texas Parks and Wildlife ( <b>co-PI</b> ), A multi-taxa assessment of the Ingleside Sandsheet Pond habitat to inform and support conservation ( <b>\$384,301</b> )
2020-23	NSF DEB ( <b>PI</b> ), Leveraging historical collections and new surveys to characterize foundational shifts in vital symbioses in the threatened Arctic ( <b>\$143,676</b> )
2019-23	NSF DEB ( <b>subaward</b> ), Digitization TCN: Collaborative: American Crossroads: Digitizing the vascular flora of the south-central US ( <b>\$42,245</b> )
2016-18	Harvard University Herbaria Postdoctoral Fellowship, Analysis of extinction risk, biotic interactions and spatial trends of phenological diversity using herbarium records (\$135,000)
2015-16	South African National Research Foundation (Lead PI), Mangrove transcriptomics (\$9300)
2015-16	Genome Research Institute, University of Pretoria, South Africa (\$4500)
2014	South African National Research Foundation Doctoral Fellowship (\$8200)
2014	South African National Research Foundation Travel Grant (\$3000)
2003-07	Nigerian Petroleum Corporation Undergraduate Fellowship (\$1912)

## **PUBLICATIONS**

(44 papers; Students and Postdoctoral Scholars <u>underlined</u>, Citations = 1725, H-index = 24)

## [2021]

- 44. **Daru, B.H.,** Willis, C.G., Meineke, E.K., <u>Ronk, A.</u>, Zobel, M., Pärtel, M., Antonelli, A., Davies, T.J. & Davis, C.C. Widespread homogenization of plant communities in the Anthropocene. *Nature Communications* 12: 6983.
- 43. **Daru, B.H.** (2021) Migratory birds distribute seeds to new climates. *Nature* 595: 34-36. [commentary]
- 42. Meineke, E.K. & **Daru**, **B.H.** (co-first author) (2021) Bias assessments to expand research harnessing biological collections. *Trends in Ecology and Evolution* 36: 1071-1082.
- 41. Rock, B.M. & Daru, B.H. (2021) Impediments to understanding seagrasses' response to global change. *Frontiers in Marine Science* 8: 608867.
- 40. **Daru, B.H.** (2021) Exploring a new way to think about climate regions. *eLife* 10: e67422. [commentary]

### [2020]

- 39. **Daru, B.H.,** Farooq, H., Antonelli, A. & Faurby, S. (2020) Endemism patterns are scale dependent. *Nature Communications* 11: 2115.
- 38. Davies, T.J., **Daru, B.H.,** Bezeng, B.S., Charles-Dominique, T., Hempson, G.P., <u>Kabongo, R.M.</u>, Maurin, O., Muasya, A.M., van der Bank, M. & Bond, W.J. (2020) Savanna tree evolutionary ages inform the reconstruction of the paleoenvironment of our hominin ancestors. *Scientific Reports* 10: 12430.
- 37. **Daru, B.H.**, <u>Karunarathne P.</u> & <u>Schliep K.</u> (2020) phyloregion: R package for biogeographic regionalization and macroecology. *Methods in Ecology and Evolution* 11: 1483-1491.

## [2019]

- 36. **Daru, B.H.,** le Roux, P.C., Gopalraj, J., <u>Park, D.S.</u>, Holt, B.G. & Greve, M. (2019) Spatial overlaps between the global protected areas network and terrestrial hotspots of evolutionary diversity. *Global Ecology and Biogeography* 28: 757-766.
- 35. <u>Mathakutha, R., Steyn, C.</u>, le Roux, P.C., <u>Blom, I.J.</u>, Chown, S.L., **Daru, B.H.**, Ripley, B.S., Louw, A. & Greve, M. (2019) Invasive species differ in key functional traits from native and non-invasive alien plant species. *Journal of Vegetation Science* 30: 994-1006.
- 34. **Daru, B.H.,** Kling, M.M., Meineke, E.K. & van Wyk, A.E. (2019) Temperature controls phenology in continuously flowering *Protea* species of subtropical Africa. *Applications in Plant Sciences* 7: e1232.

#### [2018]

- 33. **Daru, B.H.,** Bowman, E.A., Pfister, D.H. & Arnold, A.E. (2018) A novel proof of concept for capturing the diversity of endophytic fungi preserved in herbarium specimens. *Philosophical Transactions of the Royal Society B* 374: 20170395.
- 32. Meineke, E.K., Davies, T.J., **Daru**, **B.H.** & Davis, C.C. (2018) Biological collections for understanding biodiversity in the Anthropocene. *Philosophical Transactions of the Royal Society* **B** 374: 20170386.
- 31. **Daru, B.H.**, Park, D.S., Primack, R.B., Willis, C.G., Barrington, D.S., Whitfeld, T.J.S., Seidler, T.G., Sweeney, P.W., Foster, D.R., Ellison, A.M. & Davis, C.C. (2018) Widespread sampling biases in herbaria revealed from large-scale digitization. *New Phytologist* 217: 939-955.
- 30. **Daru, B.H.**, van der Bank, M. & Davies, T.J. (2018) Unravelling the evolutionary origins of biogeographic assemblages. *Diversity and Distributions* 24: 313-324.

#### [2017]

- 29. **Daru, B.H.**, Elliott, T.L., Park, D.S. & Davies, T.J. (2017) Understanding the processes underpinning patterns of phylogenetic regionalization. *Trends in Ecology and Evolution* 32: 845-860.
- 28. **Daru, B.H.**, Holt, B.G., Lessard, J.P., Yessoufou, K. & Davies, T.J. (2017) Phylogenetic regionalization of marine plants reveals close evolutionary affinities among disjunct temperate assemblages. *Biological Conservation* 213: 351–356.
- 27. **Daru, B.H.**, van der Bank, M. & Yessoufou, K. (2017) Testing the reliability of the standard and complementary DNA barcodes for the monocot subfamily Alooideae from South Africa. *Genome* 60: 337–347.
- 26. Bezeng, B.S., Morales-Castilla, I., van der Bank, M., Yessoufou, K., **Daru, B.H.** & Davies, T.J. (2017) Climate change may reduce the spread of non-native species. *Ecosphere* 8: e01694.
- 25. Yessoufou, K., **Daru**, **B.H.**, Elansary, H.O., Rampedi, I. (2017) Integrating biogeography, threat, and evolutionary data to explore extinction on crisis in the taxonomic group of cycads. *Ecology and Evolution* 7: 2735–2746.
- 24. Bezeng, B.S., Davies, T.J., **Daru, B.H.**, Kabongo, R.M., Maurin, O., Orton, R.D., Yessoufou, K., van der Bank, H. & van der Bank, M. (2017) Ten years of barcoding at the African Centre for DNA barcoding. *Genome* 60: 629–638.

#### [2016]

- 23. Charles-Dominique, T., Davies, T.J., Hempson, G.P., Bezeng, B.S., **Daru, B.H.**, Kabongo, R.M., Maurin, O., Muasya, A.M., van der Bank, M. & Bond, W.J. (2016) Spiny plants, mammal browsers and the origin of African savannas. *Proceedings of the National Academy of Sciences USA* 113: E5572–E5579.
- 22. **Daru, B.H.** & le Roux, P.C. (2016) Marine protected areas are insufficient to conserve global marine plant diversity. *Global Ecology and Biogeography* 25: 324–334.
- 21. **Daru, B.H.**, van der Bank, M., Maurin, O., Yessoufou, K., Schaefer, H., Slingsby, J.A. & Davies, T.J. (2016) A novel phylogenetic regionalization of the phytogeographic zones of southern Africa reveals their hidden evolutionary affinities. *Journal of Biogeography* 43: 155–166.
- 20. **Daru, B.H.**, Berger, D.K. & van Wyk, A.E. (2016) Opportunities for unlocking the potential of genomics for African trees. *New Phytologist* 210: 772–778.
- 19. Davies, T.J., **Daru, B.H.**, van der Bank, M., Maurin, O. & Bond, W.J. (2016) Multiple routes underground? Frost alone cannot explain the evolution of underground trees. *New Phytologist* 209: 910–912.

#### [2015]

- 18. **Daru, B.H.**, van der Bank, M. & Davies, T.J. (2015) Spatial incongruence among hotspots and complementary areas of tree diversity in southern Africa. *Diversity and Distributions* 21: 769–780.
- 17. Yessoufou, K., **Daru**, **B.H.** & Muasya, A.M. (2015) Phylogenetic exploration of commonly used medicinal plants in South Africa. *Molecular Ecology Resources* 15: 405–413.
- 16. Bello, A., **Daru, B.H.**, Stirton, C.H., Chimphango, S.B.M., van der Bank, M., Maurin, O. & Muasya, A.M. (2015) DNA barcoding reveals microevolutionary signals in fire survival and regeneration strategies in southern African Psoraleoid legumes. *AoB PLANTS* 7: plv124.
- 15. **Daru, B.H.,** Yessoufou, K., Nuttman, C. & Abalaka, J. (2015) A preliminary study of bird use of fig *Ficus* species in Amurum Forest Reserve, Nigeria. *Malimbus* 37: 1–15.

#### [2014]

- 14. Maurin, O., Davies, T.J., Burrows, J.E., **Daru, B.H.**, Yessoufou, K., Muasya, A.M., Van der Bank, M. & Bond, W.J. (2014) Savanna fire and the origins of the "underground forests" of Africa. *New Phytologist* 204: 201–214.
- 13. Manning, J.C., Boatwright, J.S., **Daru, B.H.**, Maurin, O. & Van der Bank, M. (2014) A molecular phylogeny and classification of Asphodelaceae subfamily Alooideae: towards a resolution of the prickly issue of polyphyly in the Alooids. *Systematic Botany* 39: 55–74.

- 12. Yessoufou, K., Bamigboye, S.O., **Daru, B.H.** & Van der Bank, M. (2014) Evidence of constant diversification punctuated by a mass extinction in the African cycad. *Ecology and Evolution* 4: 50–58.
- 11. Iheanacho, H.E., Njobeh, P.B., Dutton, F.M., Steenkamp, P.A., Steenkamp, L., Mthombeni, J.Q., **Daru, B.H.** & Makun, A.H. (2014) Morphological and molecular identification of filamentous *Aspergillus flavus* and *A. parasiticus* isolated from compound feeds in South Africa. *Food Microbiology* 44: 180–184.
- 10. Yessoufou, K., Gere, J., **Daru**, **B.H.** & Van der Bank, M. (2014) Differences in evolutionary history translate into differences in invasion success of alien mammals in South Africa. *Ecology and Evolution* 4: 2115–2123.

## [2013]

- 09. **Daru, B.H.,** Yessoufou, K., Mankga, L.T. & Davies, T.J. (2013) A global trend towards the loss of evolutionarily unique species in mangrove ecosystems. *PLoS ONE* 8: e66686.
- 08. **Daru, B.H.**, Manning, J.C., Boatwright, J.S., Maurin, O., Maclean, N., Schaefer, H., Kuzmina, M. & Van der Bank, M. (2013) Molecular and morphological analysis of subfamily Alooideae (Asphodelaceae) and the inclusion of *Chortolirion* in *Aloe. Taxon* 62: 62–76.
- 07. Kyalangalilwa, B., Boatwright, J.S., **Daru, B.H.**, Maurin, O. & Van der Bank, M. (2013) Phylogenetic position and revised classification of *Acacia s.l.* (Fabaceae: Mimosoideae) in Africa, including new combinations in *Vachellia* and *Senegalia*. *Botanical Journal of the Linnean Society* 172: 500–523.

## [2012]

- 06. Yessoufou, K., **Daru, B.H.** & Davies, T.J. (2012) Phylogenetic patterns of extinction risk in the Eastern Arc ecosystems, an African biodiversity hotspot. *PLoS ONE* 7: e47082.
- 05. Van der Bank, H.F., Greenfield, R., **Daru, B.H.** & Yessoufou, K. (2012) DNA barcoding reveals micro-evolutionary changes and river system-level phylogeographic resolution of seven populations of African silver catfish, *Schilbe intermedius* (Siluriformes, Schilbeidae). *Acta Ichthyologica et Piscatoria* 42: 307–320.
- 04. Yessoufou, K., Abalaka, J., Van der Bank, M. & **Daru, B.H.** (2012) Fig-frugivore interactions follow a constrained Brownian motion model of evolution in an Important Bird Area, West Africa. *Israel Journal of Ecology and Evolution* 58: 39–51.

#### **Publications in Peer-Reviewed Book Chapters**

- 03. **Daru, B.H.** & Yessoufou, K. (2016) A search for a single DNA barcode for seagrasses of the world. In: *DNA barcoding in marine perspectives: assessment and conservation of biodiversity* (eds. by S. Trivedi, A.A. Ansari, K.S. Ghosh, H. Rehman), pp. 313–330. Springer International Publishing Switzerland. doi: 10.1007/978-3-319-41840-7\_19
- 02. Gere, J., Yessoufou, K., **Daru, B.H.**, Mankga, L.T., Maurin, O. & Van der Bank, M. (2013) Incorporating *trnH-psbA* to the core DNA barcodes improves significantly species discrimination within southern African Combretaceae. In: *DNA barcoding: a practical tool for fundamental and applied biodiversity research* (eds. by Z.T. Nagy, T. Backeljau, M. De Meyer, K. Jordaens), ZooKeys 365, pp. 127–147. doi: 10.3897/zookeys.365.5728.
- 01. Mankga, L.T., Yessoufou, K., Moteetee, A.M., **Daru, B.H.** & Van der Bank, M. (2013) Efficacy of the core DNA barcodes in identifying processed and poorly conserved plant materials commonly used in South African traditional medicine. In: *DNA barcoding: a practical tool for fundamental and applied biodiversity research* (eds. by Z.T. Nagy, T. Backeljau, M. De Meyer, K. Jordaens), ZooKeys 365, pp. 215–233. doi: 10.3897/zookeys.365.5730.

## Manuscripts Submitted or Under Review

04. **Daru, B.H.,** Karunarathne, P., Davies, T.J. & Schliep, K. A global biogeographic classification for vascular plants. *Nature Ecology and Evolution* (under review).

- 03. Davies, T.J, Maurin, O., Yessoufou, K., **Daru, B.H.**, Bezeng, B.S., Mankga, L.T., Schaefer, H., Thuiller, W. & van der Bank, M. Phylogenetically diverse tree assemblages support a diversity of ecosystem goods and coincide with high human population density. *Conservation Letters* (under consideration).
- 02. <u>Gumbs, R.</u>, Chaudhary, A., Daru, B.H., Faith, D.P., Forest, F., Gray, C.L., Kowalska, A., Lee, W.S., Pellens, R., Pollock, L.J., Rosindell, J., Scherson, R.A. & Owen, N.R. The Post-2020 Global Biodiversity Framework must safeguard the Tree of Life. *Conservation Letters* (under review).
- 01. Rock, B.M. & **Daru**, **B.H.** Climate change to reorganize and homogenize seagrass communities in a changing future. *Nature Plants* (under review).

#### Features on TV, News and Popular Media Sources

- 10. EurekAlert "Global database of plants reveals human activity biggest driver of homogenization of plant communities", December 6, 2021. Available at: <a href="https://bit.ly/3ou3fST">https://bit.ly/3ou3fST</a>
- 09. TAMUCC News "TAMU-CC Biology Professor Publishes Plant Research in 'Nature Communications' Journal", December 6, 2021. Available at: <a href="https://bit.ly/3EvoXLZ">https://bit.ly/3EvoXLZ</a>
- 08. TAMUCC News "Island University Biology Professor Awarded National Science Foundation Grant as Part of Arctic Research Project", October 21, 2020. Available at: <a href="https://tamucc.edu/news/2020/10/102120-nsf-cose-biology-herbarium-daru-research-project.html#.YC61yRNKjlw">https://tamucc.edu/news/2020/10/102120-nsf-cose-biology-herbarium-daru-research-project.html#.YC61yRNKjlw</a>
- 07. TAMUCC News "Island University Researcher's Team Finds New Ways to Study Rare Animals", April 30, 2020. Available at: https://tamucc.edu/news/2020/04/043020-rare-animal-study.html#.YC61exNKjlx
- 06. EurekAlert "Critical collections", November 19, 2018. Available at: https://goo.gl/KXbvH9
- 05. Reuell, P. "Study uncovers botanical bias", *Harvard Gazette*, December 22, 2017. Available at: <a href="https://bit.ly/3hqGag0">https://bit.ly/3hqGag0</a>
- 04. TV interview, "The vital role of seagrasses in marine ecosystems", *WGBH Forum Network Boston*, January 10 (2017). Available at: <a href="https://bit.ly/2VGEmrC">https://bit.ly/2VGEmrC</a>
- 03. Powell, A. "Strong case for seagrass", *Harvard Gazette*, September 15 (2016). Available at: <a href="https://bit.ly/3k4e4c4">https://bit.ly/3k4e4c4</a>
- 02. Chabalala, J. "The thorny side of antelope evolution in Africa", *News24*, September 7 (2016). Available at: https://bit.ly/3lfk7Ko
- 01. Barras, C. "Why some trees evolved to live underground", *BBC*, November 3 (2014). Available at: <a href="https://bit.ly/2VAhR7w">https://bit.ly/2VAhR7w</a>

#### TEACHING AND ADVISING

#### TEXAS A&M UNIVERSITY-CORPUS CHRISTI

2021, Spring Semester: Systematics (graduate, ~6 participants)

2019, 2020, Spring Semester: Biogeography (graduate, 5-10 participants)

2021, Spring Semester: Plant Ecology (undergraduate, ~25 participants)

2021, Spring Semester: Biological Systematics and Phylogenetics (undergraduate, ~9 students)

2020, 2021, Fall Semester: Science Communication (undergraduate, ~15 students)

2020, Spring Semester: Plant Taxonomy, Spring 2020 (undergraduate, ~7 students)

2020, Spring Semester: Biogeography, Spring 2020 (undergraduate, ~10 students)

#### A. P. LEVENTIS ORNITHOLOGICAL RESEARCH INSTITUTE, NIGERIA

2019, Summer Semester: Conservation Biology (graduate, ~10 participants)

## UNIVERSITY OF PRETORIA, SOUTH AFRICA

2015-16: Molecular and Cell Biology (undergraduate, ~300-400 students)

#### UNIVERSITY OF JOHANNESBURG, SOUTH AFRICA

2015: R for Phylogenetics and Spatial Ecology (mixed participants, ~15 participants) 2010-16: Teaching Assistant: Plant Diversity (with Michelle van der Bank)

#### NATIONAL YOUTH SERVICE CORPS, NIGERIA

2008-2009: General High School Biology Teacher (Comprehensive Grammar Secondary School Ogbooro, Oyo State, Nigeria)

#### **MENTORING**

#### Postdoctoral, current:

Gabriel Nakamura (NSF grant, 2021- date)

## Postdoctoral, past:

Piyal Karunarathne (2019-20, now Research Fellow, Uppsala University Sweden)

#### PhD, current:

Alex Aromin (TAMUCC 2021 - date) Paul Markley (TAMUCC, 2021 - date) Kendall Johnson (TAMUCC, 2021 - date)

## MSc, past:

Arras Wiedorn (TAMUCC, 2020 - 21)

Brianna Rock (TAMUCC, 2019-21)

Sydney Ramulifho (U Johannesburg, South Africa, 2015-17)

Samantha-Leigh Jamison (U Pretoria, South Africa, 2015-17)

## <u>Undergraduates</u>, research for credit, work experience:

Samantha Maupin (TAMUCC, 2021-present)

Jordan Rodriguez (TAMUCC, 2019-21)

James Coquat (TAMUCC, 2019-21)

Christian Amos (TAMUCC, 2019-20)

Lauren Snyder (TAMUCC, 2019-20)

David Bower (U Pretoria, South Africa, 2015-15)

Lesiba Papo (U Johannesburg, South Africa, 2013-14)

Babatunde S. Ojelade (U Johannesburg, South Africa, 2013-14)

#### **PRESENTATIONS**

#### **Honorary Lecture at International Conference**

**Invited Keynote Speaker**, "Understanding plant biogeography in the Anthropocene", *Houston Regional Ecology and Evolution Student Symposium*, Texas, USA, May 2021.

**Invited Speaker**, Students & Careers Resource Symposium run by the *Ecological Society of America student section*, with the goal to discuss international student opportunities, 2021.

**Invited Plenary Speaker**, "Putting phylogenetic biogeography on the map", 21st congress of the Association for the Taxonomic Study of the Flora of Tropical Africa (AETFAT), Nairobi Kenya, May 2017 (~300 participants).

### **Conference Presentations**

- **Daru BH** (2020) GreenMaps: a Tool for Addressing the Wallacean Shortfall in the Global Distribution of Plants. 46<sup>th</sup> conference of the South African Association of Botanists, Qwaqwa, Free State, South Africa.
- Rodriguez J & **Daru BH** (2020) Mismatches and congruencies in plant sampling biases between observations and vouchered specimens. 46<sup>th</sup> conference of the South African Association of Botanists, Qwaqwa, Free State, South Africa.
- Snyder L & Daru BH (2019) How digitization efforts at small local herbaria add to the scientific community and predicting the impact of the Ruth O'Brien herbarium. *Global Change Symposium, Texas A&M University-Corpus Christi, December.*
- **Daru BH** et al. (2019) Spatial overlaps between the global protected areas network and terrestrial hotspots of evolutionary diversity, *Evolution Conference, Providence, USA*.
- **Daru BH** et al. (2019) Temperature controls phenology in continuously flowering Protea species of subtropical Africa, *Digital Data in Biodiversity Research Conference*, *Yale University, USA*.
- **Daru BH** et al. (2018) Sampling biases in herbarium specimens, *Ecological Society of America meeting, New Orleans, USA*.
- **Daru BH** (2017) Widespread phylogenetic homogenization in plant communities from anthropogenic change, *Congress of the Southern African Society for Systematic Biologists, Pretoria, South Africa*.
- **Daru BH**, le Roux PC (2016) Marine plant diversity hotspots, *International Biogeography Association: The Biogeography of Ecology Special Meeting, Beijing, China.*
- **Daru BH**, Elliott TL (2016) Are phylogenies always better at biogeographic regionalization? *The* 421st SAAB conference, Bloemfontein, South Africa.
- **Daru BH** (2015) Analysis of climate change on flowering phenology of South African *Protea* (Proteaceae), *The 41*<sup>1st</sup> *SAAB conference, Venda, South Africa*.
- **Daru BH**, Holt BG, Lessard JP, Yessoufou K, Davies TJ (2015) Phylogenetic regionalization of seagrasses, *The 41*<sup>1st</sup> SAAB conference, Venda, South Africa.
- **Daru BH**, van der Bank M, Maurin O, Yessoufou K, Schaefer H, Slingsby J, Davies TJ (2014) A phylogenetic regionalization of the phytogeographic zones of southern Africa, 17<sup>th</sup> Congress of the Society for Conservation GIS, Pacific Grove, California, USA.
- **Daru BH**, van der Bank M, Davies TJ (2014) Tree diversity hotspots in southern Africa, 10<sup>th</sup> Postgraduate Symposium Department of Botany, University of Johannesburg, South Africa.
- **Daru BH**, van der Bank M, Maurin O, Yessoufou K, Schaefer H, Slingsby J, Davies TJ (2014) A phylogenetic reclassification of the phytogeographic zones of southern Africa, 20<sup>th</sup> Congress of the Association for the Taxonomical Study of the Flora of tropical Africa, Stellenbosch, South Africa.
- **Daru BH**, van der Bank M, Maurin O, Yessoufou K, Schaefer H, Davies TJ (2013) A phylogenetic reclassification of the phytogeographic zones of southern Africa, *International Biogeography Association: The Geography of Species Association Special Meeting, Montréal, Canada.*
- **Daru BH**, van der Bank M, Maurin O, Yessoufou K, Schaefer H, Davies TJ (2013) A phylogenetic reclassification of the phytogeographic zones of southern Africa, *Ninth Postgraduate Symposium Department of Botany, University of Johannesburg, South Africa*.
- **Daru BH**, Yessoufou K, van der Bank M, Davies TJ (2013) Extinction risk in the Eastern Arc flora, 39th SAAB conference, Drakensberg, South Africa.
- **Daru BH**, Manning JC, Boatwright JS, Maurin O, van der Bank M (2012). Phylogeny of the subfamily Alooideae (Asphodelaceae), *Congress of Southern African Society for Systematic Biology (SASSB), Arniston, Cape Town, South Africa*.
- **Moderator**: DNA barcoding Webinar (2011): All-taxon biodiversity inventory projects at the African Centre for DNA Barcoding. Presented by Prof Michelle van der Bank.
- **Daru BH**, Maurin O, Maclean N, Bayer MB, van der Bank M (2011). Molecular phylogeny of *Haworthia* (Asphodelaceae): evidence from plastid and nuclear DNA sequences, *Congress of Southern African Society for Systematic Biology (SASSB), Rhodes University, South Africa*.

- **Daru BH**, Tilahun D, Osei-Bonsu I, Tambal R (2009). Does isolation influence herbivory, seed set and flower visits in the spread of *Lantana camara*? A test in Kibale, Uganda, *Conference of Nigerian Tropical Biology Association (NTBA)*, *University of Ibadan*, *Nigeria*.
- **Daru BH** (2007). Species diversity and abundance of fig wasps in *Ficus umbellata* and *F. exasperata*, *Conference of the Ecological Society of Nigeria* (*EcSN*) Jos, Nigeria.

#### **Posters**

- **Daru BH**, Karunarathne P, Schliep K (2020) phyloregion: R package for biogeographic regionalization and spatial conservation. *Conference of South African Association of Botanists, Qwaqwa, South Africa*.
- **Daru BH**, Park DS, Willis CG, Kennedy J, Davis CC (2016) Assessing fine-scale sampling bias in herbarium specimens, *Botanical Society of America, Savannah Georgia, USA*.
- **Daru BH**, van der Bank M, Davies TJ (2015) A molecular phylogenetic analysis of tree diversity hotspots in southern Africa, 35<sup>th</sup> New Phytologist Symposium. The genomes of forest trees: new frontiers of forest biology Harvard University, USA.
- **Daru BH**, Yessoufou K, Boatwright JS, van der Bank M (2012). Ecological factors shaping distribution of *Lachnaea* spp. (Thymelaeaceae), *Spring Science Poster Competition by the Royal Society of South Africa*, *Johannesburg*, *South Africa*.
- **Daru BH,** Mwansat GS, Abalaka J, Imandeh GN (2008). Species diversity and abundance of fig wasps in *Ficus* species of Amurum Forest Reserve, Nigeria (Poster Presentation), *Students Conference on Conservation Science (SCCS)*, *University of Cambridge*, UK.

## **INVITED SEMINAR**

2022	Department of Biology, Stanford University.
2021	Department of Ecology and Evolution, Stony Brook University.
2021	Department of Biology, Stanford University.
2021	Carnegie Department of Plant Biology at Stanford.
2021	Elizade University, Nigeria, Department of Biological Sciences.
2020	Louisiana State University, Department of Biological Sciences
2020	San Francisco State University, Department of Biology.
2019	Texas A&M University-College Station, Dept of Ecology & Evolutionary Biology.
2019	University of Massachusetts-Boston, Department of Biology.
2019	A. P. Leventis Ornithological Research Institute Jos, Nigeria.
2019	Consortium of Northeastern Herbaria (neherbaria.org) at Yale University.
2019	Texas A&M University-Corpus Christi, Department of Mathematics & Statistics.
2018	Yale University, Department of Ecology and Evolutionary Biology.
2018	Texas A&M University Corpus-Christi, Department of Life Sciences.
2018	University of Central Oklahoma, Biology Department.
2017	Harvard University Herbaria Seminar Series.
2017	Arnold Arboretum of Harvard University Seminar Series.
2017	Postdoctoral Science Café of Harvard University Seminar Series.
2017	University of Pennsylvania, Department of Biology.
2017	Harvard University Herbaria Seminar Series.
2016	Harvard University, Conservation Biology.
2014	Harvard University, Department of Organismic and Evolutionary Biology
2014	University of California, Berkeley, Department of Integrative Biology
2014	University of Pretoria, South Africa, Department of Plant Science
2014	A. P. Leventis Ornithological Research Institute Jos, Nigeria

## **A**WARDS

## **Academic Recognition**

2015	Winner – New Phytologist Poster Prize \$150 at the 35th New Phytologist Symposium:
	The genomes of forest trees: new frontiers of forest biology, Harvard University, USA.
2014	Best PhD Oral Presentation (gold medal) at the 10th Annual Symposium, Department of
	Botany and Plant Biotechnology, University of Johannesburg, South Africa.
2013	Best PhD Oral Presentation (gold medal) at the 9th Annual Symposium, Department of
	Botany and Plant Biotechnology, University of Johannesburg, South Africa.
2012	Third Best Poster \$41 at the Royal Society of South Africa Spring Science Poster
	Competition, Delta Environmental Centre, Johannesburg, South Africa.
2011	Best Oral presentation by a MSc student \$164 at the congress of Southern African
	Society for Systematic Biology (SASSB) 2011, Rhodes University, South Africa.

## **Additional Support**

2010	Royal Society of London/National Research Foundation Bursary: Merit postgraduate
	scholarship for Masters in Botany and Plant Biotechnology, University of Johannesburg,
	South Africa.
2008	Tropical Biology Association (TBA) Scholarship: Full scholarship with which I

## participated on the 2008 TBA field course in Kibale Forest, Uganda.

## PROFESSIONAL SERVICE

## University Service: Texas A&M University-Corpus Christi

2018	Search Committee: Tenure-track Assistant Professor position
2018, 2019	Life Sciences Department 'Journal Club Series: Trends in Global Change Biology'
2018-	Island Day, official campus preview event for prospective students and their families
2018-	Member of Biology and Marine Biology Faculty Committees
2018-20	College of Science and Engineering Scholarship and Award Committee
2019	Hosted speaker for Harte Research Institute speaker series
2019-	Representative of University Commencement ceremony

## **Editor for Scientific Journals**

Associate Editor for American Journal of Botany (2021-date).

Reviewing Editor for *eLife* (2020-date).

Guest Editor for *Philosophical Transactions of the Royal Society B* for a theme issue: "Biological collections for understanding biodiversity in the Anthropocene" (2016-date).

## **Peer-Review Services for Scientific Journals**

Reviewer for: Nature, Nature Communications, Nature Ecology and Evolution, Scientific Reports, eLife, Conservation Biology, Diversity and Distributions, Climate Change Ecology, Molecular Ecology, Global Ecology and Biogeography, Molecular Ecology Resources, African Journal of Ecology, South African Journal of Botany, Journal of Biogeography, Tropical Ecology, Phytotaxa, and Botany Letters.

#### **Grant Panel Service**

#### National Science Foundation Panel member:

1. Systematics and Biodiversity Science Program Panelist. May 2021.

2. Harnessing the Data Revolution (HDR): Institutes for Data-Intensive Research in Science and Engineering [NSF 21-519]. April, 2021.

## Service to initiatives, community

- 2018- Member of the Texas-Oklahoma Regional Consortium of Herbaria
- 2019- Member, IUCN's Task Force on Phylogenetic Diversity
- 2013-16 Website Manager, South African Association of Botanists (www.sabotany.co.za)

#### **Professional Affiliation**

2016-	Botanical Society of America
2014-	Society for Conservation GIS (geographic information systems)
2014-	International Biogeography Society
2013-	Southern African Association of Botanists
2010-	Southern African Society for Systematic Biologists
2008-	Tropical Biology Association, Cambridge UK
2007-	Nigerian Conservation Foundation
2007-	Ecological Society of Nigeria.

## PROFESSIONAL DEVELOPMENT

- 2019 Certificate of Best Practices for Online Course Design, Texas A&M University-Corpus Christi.
- 2016 Royal Society Discussion Meeting: *New trends in evolutionary biology: biological, philosophical and social science perspectives.* The Royal Society House, London, UK.
- 2015 Certificate of participation in African Forest Forum training workshop on *African Forestry Experts* on Forest Related International Agreements, Mombasa, Kenya.
- 2014 Certificate in *Working with Geodatabase Topology,* advanced GIS course at Asilomar Conference Grounds, California, USA.
- 2012 Advanced GIS analytic course at the University of Johannesburg, South Africa.
- 2012 Toyota Enviro Outreach plant samples collection, Cape Floristic Region, South Africa.
- 2012 Advanced R statistics course in Ecology, University of Sheffield, UK.
- 2011 Toyota Enviro Outreach plant samples collection, Maputaland biodiversity hotspot.
- 2011 R workshop in Phylogenetics and Spatial Ecology, University of Cape Town, South Africa.
- 2009 Introduction to R in Ecology, A. P. Leventis Ornithological Research Institute, Nigeria.
- 2008 Introductory Course on Molecular Ecology/DNA Barcoding at Imperial College London, UK.
- 2008 Tropical Biology Association (TBA) Field course (08/2) in Kibale Forest, Uganda.