

Peer Reviewed Publications:

1. Igwe, D.O., Ihearahu O.C., Osano, A.A., Acquaah G., Ude, G.N., (2022)
Assessment of genetic diversity of Musa species accessions with variable
genomes using ISSR and SCoT markers. Springer Journal of Genetic Resources
and Crop Evolution (Springer). <https://doi.org/10.1007/s10722-021-01202-8>.
2. Igwe, D.O., Ihearahu O.C., Osano, A.A., Acquaah G., Ude, G.N., (2021) Genetic
Diversity and Population Assessment of Musa L. (Musaceae) Employing CDDP
Markers. Plant Molecular Biology Reporter. <https://doi.org/10.1007/s11105-021-01290-x>
3. Igwe, D.O., Anyanwu C.B., Afiukwa, C. A., Nnamani, C. V., Nweke F. N., Ude,
G. N., Ubi, B. E., (2021). Phenotypic and molecular screenings for determination
of cassava mosaic disease (CMD) status in farmers' fields in Ebonyi State,
Nigeria. Molecular Biology Reports 48(85):1-14.
4. Ude, G.N., Igwe, D.O., Brown C., Jackson M., Bangura, A., Ozokonkwo-Alor,
O., Ihearahu, O.C., Chosen, O., Okoro M., Ene, C., Chieze, V., Unachukwu, M.,
Onyia, C., Acquaah, G., Ogbonna, J., Das, A., DNA barcoding for the
identification of fish species from the freshwaters of Enugu and Anambra states
of Nigeria (2020). Journal of Conservative Genetic Resources, Springer, Nature -
<https://doi.org/10.1007/s12686-020-01155-7>
5. Eraga, L.I, Avwioroko O.J., Aganbi E., Anigboro A.A., Obih C., Ude, G.N,
Tonukari N.J., (2020) Isolation, identification and in silico analysis of bitter
leaves (*Vernonia amygdalina*) ribulose-1,5-bisphosphate carboxylase/oxygenase
gene. Gene Reports. DOI: 10.1016/j.genrep.2020.100720
6. Ude, G.N., Igwe, D.O., McCormick, J., Ozokonkwo-Alor, O., Harper, J., Ballah,
D., Aninweze, C., Chosen, O., Okoro, M., Ene, C., Chieze, V., Unachukwu, M.,
Onyia, C., Acquaah, G., Ogbonna, J. and Das, A. (2019) Genetic Diversity and
DNA Barcoding of Yam Accessions from Southern Nigeria. American Journal
of Plant Sciences, 10: 179-207.

UDE's Resume Updated June 27th, 2022

7. Igwe D. O, Afiukwa C. A, Acquaah G, Ude G. N. (2019). Genetic diversity and structure of *Capsicum annum* as revealed by Start Codon Targeted and Directed Amplified Minisatellite DNA markers. *Hereditas* volume 156, Article number: 32 (2019).
8. Igwe DO, Afiukwa CA, Ubi BE, Ogbu KI, Ojuederie OB, Ude GN (2017). Assessment of genetic diversity in *Vigna unguiculata* L. (Walp) accessions using inter-simple sequence repeat (ISSR) and start codon targeted (SCoT) polymorphic Markers. *BMC Genetics* (2017) 18:98.
9. Ude George N, Acquaah G, Irish Brian M, and Das Aditi (2014). Targeted parallel sequencing of the *Musa* species: searching for an alternative model system for polyploidy studies. *Africa Journal of Biotechnology*. 13(41):4052-4060.
10. Shaibu AA, Okoro P, Ude G, Olukolu BA, Igelbrecht I, Tenkouano A, Ogburia MN, Moonan F, and Dimkpa C. (2013). Genotype by Environment (GxE) Modeling of the Variable Initiation of Parthenocarpy sensu strict in *Musa*: Elucidation of the Environment Components of Variable Expressivity of Parthenocarpy in a Facultative Apomictic *Musa acuminata* subspecies *Microcarpa* Model System. *American Journal of Experimental Agriculture*. 3(2):262-276.
11. Okoro P, Shaibu A.A, Ude G, Olukolu B.A, Ingelbrecht I, Tenkouano A, Ogburia M.N, Moonan F, Dimkpa C. (2011). Genetic evidence of developmental components of parthenocarpy in apomictic *Musa* species. *Journal of Plant Breeding and Crop Science*. 3:138-145.
12. Ochieng JW, Muigai AWT, Ude GN. (2007A). Phylogenetics in plant biotechnology: principles obstacles and opportunities for the resource poor. *African Journal of Biotechnology* Vol. 6 (6), pp. 639-649.
13. Ochieng JW, Muigai AWT, Ude GN. (2007B). Localizing genes using linkage disequilibrium in plants: integrating lessons from the medical genetics. *African Journal of Biotechnology* Vol. 6 (6), pp. 649.

14. Egesi CN, Asiedu R., Ude G., Ogunyemi S., Egunjobi JK (2006). AFLP marker diversity in water yam (*Dioscorea alata* L.). *Plant Genetic Resources* 4(3); 181–187.

15. Ude GN, Dimkpa CO, Anegebe PO, Shaibu AA, Tenkouano A, M. Pillay, Tchoundjeu Z (2004) Analysis of genetic diversity in accessions of *Irvingia gabonensis* (Aubry-Lecomte Ex O'Rorke) Bail. *African Journal of Biotechnology* Vol. 5(3):219-223.

16. G. Acquah, G. Ude, K. Matand, N.J. Tonukari. 2006.

Agricultural Biotechnology and Developing Countries: Prospects, Challenges, and Impact. In *Floriculture, Ornamental and Plant Biotechnology: advances and topical issues* (1st Edition), Edited by Jaime A. Teixeira da Silva (Ed.) and published by Global Books in Japan. Pages 315-327.

7. Ude GN, Kenworthy W, Costa JM, Cregan PB, Alvernaz J (2003). Genetic diversity of soybean cultivars from China, Japan, North America, and North American soybean ancestral lines using amplified fragment length polymorphism (AFLP). *Crop Sci.* 43:1858-1867.

UDE's Resume Updated June 27th, 2022

8. Ude G, Ogundiwin E, Pillay M, Tenkouano A (2003) Genetic Diversity in an African Plantain core collection using AFLP and RAPD markers. *Theor Appl Genet.* 107:248-255.

9. Ude GN, Costa JM, Kenworthy WJ, Sardanelli S (2002). AFLP markers associated with a QTL for resistance to soybean cyst nematode race-3 (*Heterodera glycines* Ichinohe). *J. Genetics and Breed.* 56:213-220.

10. Ude G, Pillay M., Nwakanma D, Tenkouano A (2002) Analysis of genetic diversity and sectional relationships in *Musa* using AFLP markers. *Theor Appl Genet* 104:1246-1252.

11. Ude G., Pillay M, Nwakanma D, Tenkouano A (2002) Genetic diversity in *Musa acuminata* Colla and *M. balbisiana* Colla and some of their natural hybrids using AFLP Markers. *Theor Appl Genet* 104:1239-1245.

12. Pillay M, Ogundiwin E, Nwakanma DC, Ude G, Tenkouano A (2001) Analysis of genetic diversity and relationships in East African banana germplasm. *Theor Appl Genet*: 102:965-970.

13. Ude GN, Devine TE, Kuykendall LD, Matthews BF, Saunders JA, Kenworthy W, Lin JJ (1999) Molecular mapping of the soybean nodulation gene, *Rj4*. *Symbiosis* 26:101-110.

14. O'Neill NR, van Berkum P, Lin JJ, Kuo J, Ude GN, Kenworthy W, Saunders JA (1997) Application of amplified restriction fragment length polymorphism for genetic characterization of *Colletotrichum* pathogens of alfalfa. *Phytopathology* 87 (7):745-750.

15. Lin JJ, Kuo J, Ma J, Saunders JA, Beard HS, Macdonald MH, Kenworthy W, Ude GN, Matthews BF (1996) Identification of molecular markers in soybean comparing RFLP, RAPD and AFLP DNA mapping techniques. *Plant Molecular Biology Reporter* 14 (2):156-169.

Journal Article Accepted for Publication

Igwe, D.O., Iheahuru O.C., Osano, A.A., Acquah G., Ude, G.N., (2021) Assessment of genetic diversity of *Musa* species accessions with variable genomes using ISSR and SCoT markers. *Springer Journal of Genetic Resources and Crop Evolution*.

Book(s)

Michael Pillay, Ude G.N., Kole C., 2012. *Genetics, Genomics and Breeding of bananas*. Series on Genetics, Genomics and breeding of Crop Plants. Series Editor Chittaranjan Kole, Clemson University, Clemson, SC, USA. CRC Press, Science Publishers.

Book Chapters

1. George Nkem Ude, David Okeh Igwe, Christie Oby Onyia, Chosen Ekene Obih. (2022). Biodiversity and genetic resources conservation in Nigeria. In: Obembe, O.O., Ekundayo, E.O., Okoli, A.S., Gidado, A., Adetunji, C.O., Ibrahim, A.B., & Ubi, B.E. (Eds.) *Agricultural Biotechnology, Biodiversity and Bioresources Conservation and Utilization* (1st ed.). CRC Press.

<https://doi.org/10.1201/9781003178880>.

UDE's Resume Updated June 27th, 2022

2. Andrew Chibuzor Iloh, George Ude, and Christie Onyia (2022). Securing the Genetic Base of Indigenous Food Plants: Their role in promoting sustainable food systems. In: Obembe, O.O., Ekundayo, E.O., Okoli, A.S., Gidado, A., Adetunji, C.O., Ibrahim, A.B., & Ubi, B.E. (Eds.) *Agricultural Biotechnology, Biodiversity and Bioresources Conservation and Utilization* (1st ed.). CRC Press.

<https://doi.org/10.1201/9781003178880>.

3. David Okeh Igwe, George Nkem Ude and George Acquaah. (2020). Use of comparative molecular markers and plant tissue culture techniques for genetic diversity assessment and rapid production of Musa species at Bowie State University: In *Principles of plant genetics and breeding* by George Acquaah, 3rd edition. Wiley-Blackwell.

4. David Okeh Igwe, George Nkem Ude and George Acquaah. (2020). Bioinformatics, Big Data Analytics, and Computer Simulations in Plant Breeding: In *Principles of plant genetics and breeding* by George Acquaah, 3rd edition. Wiley-Blackwell.

5. Ude G.N, Irish B.M., Acquaah G. (2012). Molecular marker survey of genetic diversity in the genus *Garcinia*. In chapter 20 of *Principles of plant genetics and breeding* by George Acquaah, 2nd edition. Wiley-Blackwell.

6. George Ude (2014). Experience with publishing online open access journals (Pages 27-31). In a book titled 'A practical guide to publishing in academe: Face time with faculty peers'. Edited by Dr. George Acquaah, Bowie State University publication, 2014.

7. Ude George, Okoro Michael, Ebiringa Chioma, Das Aditi, and Micklos Dave (2014) DNA Barcode Initiative for the Species of Eastern Nigeria. Presented at the 2nd, International Conference of Biotechnology, organized by Godfrey Okoye University at Enugu State Nigeria on Oct. 6th-13th, 2013. Accepted for publication in the proceedings of the International Conference on Biotechnology and National

Development (ICOBAND). Acceptance letter is attached.

8. Okoro Michael, Ude G., Micklos D. (2013) DNA barcoding of traditional medicinal plants of Enugu State, Nigeria. Presented at the 2nd, International Conference of Biotechnology, organized by Godfrey Okoye University at Enugu State Nigeria on Oct. 6th-13th, 2013. Accepted for publication in the proceedings of the International Conference on Biotechnology and National Development (ICOBAND). Acceptance letter is attached.

Book Chapters Accepted and in Press for Publication

9. Ude, G. N., Igwe, D. O., Onyia, C. O. and Obih, C. E. (2021) Biodiversity and genetic resources conservation in Nigeria. In: Obembe, O.. et al. (eds.) Multidisciplinary Applications and Advances in Biotechnology - II: Agricultural Biotechnology, biodiversity and bio-resources conservation and Utilization, Taylor and Francis Publishers, USA (In Press)

10. Iloh, A. C., Ude, G. and Onyia, C. (2021) Securing the genetic base of indigenous food plants: their role in promoting sustainable food systems. In: Obembe, O.. et al. (eds.) Multidisciplinary Applications and Advances in Biotechnology - II: Agricultural Biotechnology, biodiversity and bio-resources conservation and Utilization, Taylor and Francis Publishers, USA (In Press)

UDE's Resume Updated June 27th, 2022

Other Publications

1. George Ude. 2011. Plant Biology Education Posters: Implementing Inquiry-Based Laboratory Activities Using Improved Strategies for Teaching Basic Biological Concepts. ASPB News: Vol. 38:5 (September/October - 2011).

2. George Ude. 2012. Plant Biology Education Posters: Impacting the Nation's STEM Classrooms through the Application of Plant-Based Instructional Materials and Outreach Activities. ASPB News: Vol. 39:5 (September/October - 2012).

Two Laboratory manuals (compiled and customized for my Molecular Biology Class and the Biotechnology Summer Institute).

3. George Ude (2012). Molecular Biology Lab manual (2012). This is a 214 pages

lab manual that contains the laboratory experiments and procedures for the experiments that are conducted by students in my class throughout the semester. This is a compilation of published protocols which I summarized, bound into a book, printed and provided for students in my molecular biology class free of charge.

4. George Ude (2011). Laboratory manual customized for the Biotechnology Summer Institute. The manual is a 344 page document containing 8 experimental procedures in genomics and proteomics that include – Lab1: DNA Extraction; Lab2: PV92 PCR informatics; Lab3: GMO Investigator; Lab4: pGLO Bacterial transformation; Lab 5: Forensic DNA Fingerprinting; Lab 6: Green Fluorescent Protein (GFP); Lab 7: Comparative Proteomics I; Lab 8: Comparative Proteomics II.

GeneBank Publications

The GenBank database is designed to provide and encourage access within the scientific community to the most up to date and comprehensive DNA sequence information. And there is evidence that most of the important tropical species are not represented in the world genebanks. My research team in collaboration with African scientists undertook to barcode African species with the goal to populate the genebank with DNA barcodes derived from those species. Unique sequence identifiers for species studied in Africa were then submitted for publication and they were reviewed for acceptance and then published in the geneBank. See the list below and also see the attached document for more detailed information about the tropical species and their references in the geneBank.

5. Okoro,M., Ebiringa,C., Ude,G., Micklos,D. and Acquaah,G.(2014). Dialium guineense isolate DNAS-60-59791 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast
GenBank: KJ735967.1

UDE's Resume Updated June 27th, 2022

6. Ude,G., Micklos,D., Ogbonna,C., Das,A., Juliet,M. and Urama,F. (2014).

Azadirachta indica isolate DNAS-5F-59757 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast
GenBank: KJ735966.1

7. Ude,G., Micklos,D., Osuji,G., Okoria,G., Ukwueze,N. and Ebiringa,C. (2014).
Emilia praetermissa isolate DNAS-5D-59892 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast
GenBank: KJ735965.1

8. Ude,G., Micklos,D., Onyia,C., Unachukwu,M., Adegbite,A. and Poopola,J. (2014).
Alternanthera sp. DNAS-5C-59883 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast
GenBank: KJ735964.1

9. Micklos,D., Ude,G., Onuigbo,A., Obih,C., Ogbonna,C. and Akpan,S. (2014).
Azalia africana isolate DNAS-5B-59858 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast
GenBank: KJ735963.1

10. Micklos,D., Ude,G., Njoku,M.G., Ebiringa,C., Onyia,C. and Okolo,M. (2014).
Newbouldia laevis isolate DNAS-59-59750 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast
GenBank: KJ735962.1

11. Ude,G., Micklos,D., John,S., Marian,U., Ogbonna,J., Peter,O., Oladejo,S. and Anieke,C. (2014).
Strophanthus preussii isolate DNAS-5A-59748 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast
GenBank: KJ746500.1.

12. Micklos,D., Ogbonna,C., Ude,G., Njoku,M.G., Adegoke,A., Onyia,C., Unachukwu,M., Ogbonna,J., Okolo,B. and Opara,H. (2014).
Treculia africana isolate DNAS-5E-59745 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast
GenBank: KJ746499.1.

13. Ude,G., Micklos,D., Ramsey,P., Unachukwu,M., Njoku,M.G., Chikezie,C., Poopola,J. and Igwe,D. (2014).
Ageratum conyzoides isolate DNAS-61-59791

ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene,
partial cds; chloroplast GenBank: KJ746498.1

BioMuSIC Project CD publication (2010)

BioMusic innovation was a project which I conceived to help me teach Biological Sciences (Biol 101) to non-biology majors. Since biology concepts are difficult for regular students to understand I thought that putting my biology curriculum into lyrics and making music out of it will make it easy for students to sing and learn simultaneously. So, I worked with two artists (one was a student) to produce 5 Music CD's. The last two which were published in 2010 in the form of rap songs were:

14. Cell Division (Meiosis and Mitosis) curriculum content lyrics (rap music)

15. Cellular Respiration curriculum content lyrics (rap music)