Curriculum Vitae

Benjamin Ewa UBI [B.Sc.(Agric.), M.Sc., Ph.D)]

Field of specialization: Plant breeding & Biotechnology

Specific research interest: Molecular breeding, germplasm characterization & enhancement, functional genomics & proteomics

Contact address:
1. Benjamin Ewa Ubi, Ph.D.
Head, Dept. of Biotechnology, Ebonyi State University
P.M.B 053 Abakaliki, Ebonyi State, Nigeria

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Personal details:
Date of birth: 23rd September, 1968 Gender: Male Citizenship: Nigeria

Marital status: Married with children

Next of kin: Mrs. Veronica Ubi
Ebonyi State University Staff Secondary School
CAS Campus, Abakaliki

Home Town: Ugep Urban, Cross River State

Religion: Christian (Catholic Roman Church)

Academic Institutions attended with Dates

1. University of Ibadan, Ibadan, Nigeria	-	1994-1998
2. University of Ibadan, Ibadan, Nigeria	-	1992-1994
3. University of Calabar, Calabar, Nigeria	-	1985- 1990
4. Community Secondary Grammar School (Cosgrams), Ugep, C.R.State	-	1981- 1985
5. Biase Secondary School (BIASCO), Ehom, C.R.State	-	1980-1981
6. St. Mary's Primary School (Primary No. 4.), Ugep, C.R.State	-	1975-1980

Academic Qualifications with Specializations and Dates:
1. Ph.D. Agronomy Dept. of Agronomy, University of Ibadan, Ibadan -1998
Field of Specialization: Plant breeding & Biotechnology

2. M.Sc. Crop Science Dept. of Agronomy, University of Ibadan, Ibadan -1994
Field of Specialization: Crop Science (Plant breeding)
GPA: 69.8 (Top-of-Class in the M.Sc. Agronomy Graduating Class of about 60 students)

3. B.Sc. (Agric) Agronomy Dept. of Agronomy, University of Calabar, Calabar - 1990
   Field of Specialization: Agronomy
   Class of Degree: 2nd Upper (Top-of-Class in the entire Faculty of Agriculture Graduating Class)

Some Certificated Complementary Training Courses with Dates:

1. Agricultural Research Management, conducted by Dr. Bola Elegbe at the International Institute of Tropical Agriculture (IITA) Ibadan, 16 – 21 June, 1997.

2. Stephen Covey's Effective Leadership Course, conducted by Dr. Jim Gulley, Leader, Training Program, at the International Institute of Tropical Agriculture (IITA), Ibadan, 18 February – 13 March, 1997.

3. Training and Communication Skills, conducted by Drs. Terry Olowu & Jim Gulley at the International Institute of Tropical Agriculture (IITA), Ibadan, 13 – 16 June, 1996

4. Statistical Computing with GENSTAT and SAS, conducted by IITA's Biometrics Unit, held at the International Institute of Tropical Agriculture (IITA), Ibadan, 9 – 20 November, 1995.

5. Writing Winning Proposals, conducted by Professor S. T. Bajah, at the International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria, 8 – 25 August, 1995.

Special skills:
- Well-trained in molecular biology and good laboratory practice

- Well-trained in occupational health and bio-safety issues applicable to biotechnology

- Very familiar with RAPD genotyping and especially with optimizing the PCR conditions to obtain consistent (reproducible) amplification profiles; experienced in genomic library construction and can construct a cDNA library; very familiar with RFLP analysis using both radioactive (^{32}P) and non-radioactive (ECL-direct and Dig) systems; AFLP genotyping.

- Knowledgeable in germplasm characterization and enhancement

- Knowledgeable in statistical applications in plant breeding experimentation

- Hands-on-experience in gene isolation, cloning and sequencing; Southern & Northern hybridization

- Familiar with *Agrobacterium*-mediated transformation and tissue/organ culture techniques
- High level proficiency in both written and oral communication in English Language
- Experienced in Agriculture/Agricultural biotechnology research, teaching and training

- Good leadership skills and excellent in team work

- Computer literate and very family with genomic linkage analysis software

Work experience:
Jan. 2010 – date: Visiting Professor, Dept. of Agronomy, Cross River University of Technology (CRUTECH)

Oct.2008 – Oct. 2009: Japanese Society for the Promotion of Sciences (JSPS), Visiting Research Scientist, Laboratory of Molecular & Cell Biology, National Institute of Fruit Tree Science, Tsukuba, Japan
Research responsibilities: Molecular cloning and functional characterization of genes important for stabilizing the fruit tree production under global warming conditions.

Nov. 2005 – date: Associate Professor, Dept. of Biotechnology, Ebonyi State University, Abakaliki
Responsibilities – Teaching & Research at the undergraduate and postgraduate levels. Besides my teaching and research activities, I am also actively involved in various committees, PG seminars, undergraduate seminars and other academic and social activities of the University. Courses taught include:

A. Undergraduate Courses:
1. BTE 428: Plant Biotechnology
2. BCH 413: Biotechnology
3. BTE 301: Genetic Engineering
4. BTE 215: Industrial Biotechnology I
5. BTE 315: Industrial Biotechnology II
6. BCH 361: Plant Biochemistry
7. BTE 461: Bioinformatics
8. BTE 464: Bioethics
9. BTE 425 Plant Breeding
10. BTE 463 Biosafety

B. Postgraduate Courses:
11. BTE 701: Advanced Biotechnology
12. BCH 715: Advanced Molecular Biology
13. BCH 724: Advanced Genetic Engineering

Research: Developed various research projects for postgraduate students with a view to attract International research partnership and funding. I recently attracted a big Grant to the University from the Alliance for A Green Revolution in Africa (AGRA) on research for the Program on African Seed Systems (PASS) on rice for the resource – poor African farmers by facilitating the hosting of an AGRA funded Scientist in our Research Center and the Implementation of the rice seed project development. In addition, I have developed active Plant biotechnology research linkages between EBSU and the Forestry and Forestry Biotechnology Institute (FABI)/University of Pretoria, South Africa, and other CGIAR Centers including IITA (Ibadan), WARDA (Cotonou); as well as the National Agricultural Research Systems (NARS). Two of my Ph.D. students are current beneficiaries of this partnership at the FABI as part of his training in molecular genetics under the sponsorship of the ETF. A third Ph.D. student is currently being trained to conduct part of his Ph.D. at the National Cereals Research Institute, Baddeggi, Niger State.

No. of Ph.D. students: Four (4) – [Three Ph.D. students already graduated]
No. of M Sc. students: Seven (7) – [Three (3) students already graduated]
Total no. of undergraduate students: Over 55 undergraduate projects supervised and graduated.

2005/2006 Session: Adjunct Associate Professor, Dept. of Genetics & Biotechnology, University of Calabar, Calabar, Nigeria.

Courses taught
Undergraduate Courses:
GBT 3051: Molecular Biology I (3 Credit Units)
GBT 3052: Molecular Biology II (3 Credit Units)
GBT 4051: Plant Breeding (3 Credit Units)
GBT 2022: Introductory Biotechnology (3 Credit Units)
GBT 4012: Plant Tissue Culture (3 Credit Units)
GBT 4031: Principles of Biotechnology I (3 Credit Units)
GBT 4032: Principles of Biotechnology II (3 Credit Units)
GBT 4042: Agricultural Biotechnology (3 Credit Units)
GBT 4062: Cytogenetics II (3 Credit Units)
GBT 4082: Animal Tissue Culture (3 Credit Units)
GBT 4021: Cytogenetics I (3 Credit Units)

Postgraduate courses:
GBT 5011: Techniques in Plant Breeding (3 Credits)
GBT 5081: Advanced Agricultural Biotechnology (3 Credits)
GBT 5082: Current Topics in Plant and Animal Genetics (1 Credit Unit)
GBT 5021: Advanced Molecular Genetics (3 Credit Units)

1991 – 2005: Lecturer, Dept. of Crop Science, University of Calabar, Calabar, Nigeria

Courses taught:
Undergraduate Courses:
AGC 5301: Plant breeding (3 Credit Units)
AGC 5601: Field Experimentation (3 Credit Units)
AGC 2101: Principles of Crop Production (3 Credit Units)
AGC 2302: Genetics and Cytology (3 Credit Units)

Postgraduate Courses:
AGC 6301: Advanced Plant breeding (3 Credit Units)
AGC 6601: Advanced Field Experimentation (3 Credit Units)

April 2003 – April 2004 Visiting Research Scientist, Inoue Foundation for Science Visiting Research Fellowship, Laboratory of Molecular and Cell Biology, National Institute of Fruit Tree Science, National Agricultural Research Organization, Tsukuba, Japan
Project investigated: Molecular cloning and functional analysis of the *Anthocyanin synthase* gene

Feb. – July 2002: Research Fellow, Molecular Biology Laboratory, CSIRO Plant Industry, Australia
Project investigated: Manipulation of anthocyanin biosynthesis genes to produce novel products

July 1999 – July 2001: Postdoctoral Fellow, Science & Technology Agency (STA) Post doctoral Fellowship, Biotechnology Laboratory, Dept. of Plant Breeding, National Institute of Livestock & Grassland Science, Nishinasuno, Japan
Project summary: Genome analysis in rhodesgrass (*Chloris gayana* Kunth). This species was characterized molecularly and parents selected based on molecular marker divergence to constitute an F1 pseudo testcross mapping population which was used to construct a genetic linkage map based on RFLPs and AFLP markers. Heterologous rice cDNA clones and a genomic library constructed from a cultivar of these species revealed a promising level of putatively polymorphic clones in the parents of our mapping cross selected on the basis of AFLP data.

Feb. 1998 – June 1999: Consultant Plant Breeder / Molecular Geneticist, Plant Health Management Division, International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria.
Responsibilities: Raising an F2 cowpea mapping population segregating for *Striga gesneroides* resistance, isolating plant DNA for marker analysis and field evaluation of $F_{2:3}$ families to determine the inheritance of resistance for gene tagging based on AFLP markers.

1996 – 1997: Graduate Research Fellow, Biotechnology Research Unit, IITA, Ibadan
Research Focus: Studies were conducted to map the genome of cowpea (*Vigna unguiculata* L. Walp.) based on molecular markers. Random amplified polymorphic DNA (RAPD) markers were used to develop a genomic linkage map using a recombinant inbred (RI) population developed from an intersubspecific cowpea cross. Some phenotypic markers segregating in the cross were also mapped. Field studies were conducted using F_3 (early generation) and F_6 (late generation) families of the cowpea cross to provide insights into the genetics of some of the agronomically important traits segregating in this cross. The RI (F_8) population was also scored for 12 agronomic traits used for quantitative trait loci (QTL) analysis.

In addition, I collaborated on a project for the fingerprinting of cowpea breeding lines and cultivars using the AFLP and microsatellite markers.

1990 – 1991: National Youth Service Corps (NYSC), Folk Technical College, Ikwo, Ebonyi State
Responsibilities: Head of Dept. of Agriculture, Farm Manager and Teaching during the One-year NYSC Program.

Academic Honours, Distinctions & Awards:

2007 Visiting Research Scientist, Japanese Society for the Promotion of Science Award, Laboratory of Cell & Molecular Biology, National Institute of Fruit Tree Science, National Agricultural Research Organisation, Tsukuba, Japan

2007 Attracted a big Research Grant to the University from the Alliance for A Green Revolution in Africa (AGRA) on research for the resource – poor African farmers by facilitating the hosting of an AGRA Scientist.

2006 International Foundation for Science (IFS, Stockholm, Sweden) outstanding Award for a project on applying biotechnology tools for identifying drought tolerant rice genotypes in Nigeria.

April 2003 – April 2004 Inoue Foundation for Science Visiting Research Fellowship, Laboratory of Cell & Molecular Biology, National Institute of Fruit Tree Science, National Agricultural Research Organisation, Tsukuba, Japan.

Feb. 2002 – July 2002 Research Fellow, Molecular Biology Laboratory, Commonwealth Scientific & Industrial Research Organisation (CSIRO), Horticultural Dept., Australia.

July 1999 – July 2001 Science & Technology (STA) Postdoctoral Fellowship, Biotechnology Laboratory, Dept. of Plant breeding, National Institute of Grassland & Livestock Science, National Agricultural Research Organisation, Nishinasuno, Japan.

1995 – 1997 IITA Ph.D. Research Fellow, Biotechnology Research Unit, International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria

1994 Best graduating student in the M.Sc. degree class, Dept. of Agronomy, Faculty of Agriculture & Forestry, University of Ibadan, Ibadan.

1990 Best graduating student, Faculty of Agriculture, University of Calabar, Calabar.

1987 – 1990 United African Company (UAC) Scholarship Award for merit in the Faculty of Agriculture, University of Calabar.

Other Professional Experience

I have participated in several seminars, conferences, training workshops, symposia and work planning review meetings. Some of these include:

1. 24th Annual/ 1st International Conference of the Biotechnology Society of Nigeria, Joseph Ayo Babalola University, Ilesa (Nigeria), 21-25 August, 2011.

2. 20th Annual Conference of the Biotechnology Society of Nigeria, Ebonyi State University (Nigeria), 14 – 17 Novemeber, 2007

3. Foundation for African Development through International Biotechnology (FADIB) Workshop, Institute of Management Technology (IMT), Enugu, 5-7 November, 2007.

4. 19th Annual Conference of the Biotechnology Society of Nigeria, University of Jos (Nigeria), 15-18 Novemeber, 2006

5. Biotechnology Forum, Ebonyi State University. Delivered a paper titled: 'Biotechnology Research in Nigeria: opportunities for collaboration and funding'; 26 July 2008.

6. Australian Horticulture (AusHort) Meeting, Mildura, Merbein, Victoria, Australia, 6-7 June, 2002:
   Day 1 (6 June): Made a Scientific Presentation – 'Manipulation of anthocyanin biosynthesis genes to produce novel products'
   Day 2 (7 June): Made a Presentation to the apple Industry Group – 'Apple Anthocyanins'.

7. Second International Workshop on Anthocyanins, Wirrina Cove Resort, South Australia, 17 – 19 April, 2002.

8. Second International Symposium on the 'Molecular Breeding of Forage Crops 2000' held in Lorne and Hamilton, Victoria, Australia, 19 – 24 November, 2000.

9. Rice Genome Forum VIII, held at Tsukuba International Congress Center (Main Hall), Tsukuba, Ibaraki, Japan, 10 February, 2000.
10. International Workshop on Cassava bacterial blight, held at the International Institute of Tropical Agriculture (IITA) Biological Control Program, Cotonou, Benin Republic (April 1999).

11. First, Second & Third Annual Symposia of the International Association of Research Scholars & Fellows (IARSAF), International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria: 5 – 6 October, 1995 (1st), 2 – 4 October, 1996 (2nd) & 9 -10 October, 1997 (3rd).

12. DNA markers in crop improvement. Workshop organized by the Crop Improvement Division (CID), International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria, 21 – 22 August, 1996.

13. Annual Collaborators' Meeting, IITA – John Innes Centre (JIC) – Natural Resources Institute (NRI) Gatsby Funded Biotechnology Projects, 7 – 9 February, 1997, IITA, Ibadan, Nigeria.

14. Genome mapping, linkage analysis and applications in Crop Improvement, by Dr. H. D. Mignouna, Molecular Geneticist, Biotechnology Research Unit, IITA, Ibadan, Nigeria, October 1994.

Invited Seminar Speaker
Genome Analysis in rhodesgrass, delivered at the Hokkaido National Agricultural Experimental Station, Sapporo, Japan, 13 March 2001

Individual Training
I have provided technical assistance to Research Assistants, Scholars, Short-term Trainees, Students and Collaborators at different stages in the research process ranging from good laboratory practice, project formulation, and organization of agronomic experiments to data analysis.

Positions held

1. June 2008 – date: Board Member, Biotechnology Research & Development Centre, Ebonyi State University, Abakaliki.

2. Jan. – March, 2010: Ag. Director, Biotechnology Research & Development Centre, Ebonyi State University, Abakaliki

3. Jan. 2010 – date: Head, Dept. of Biotechnology, Ebonyi State University, Abakaliki

4. Aug. 2006 – Oct. 2008: Director, Biotechnology Research & Development Center, Ebonyi State University, Abakaliki, Nigeria.

5. 2007: Chairman, Local Organizing Committee of the 20th Annual Conference of the Biotechnology Society of Nigeria, held November 14 – 15, 2007.

6. Sept.2007 – Oct.2008: Member, Postgraduate School Board, Ebonyi State University, Abakaliki

7. Dec. 2007 – Oct. 2008: Chairman, Postgraduate School Committee on Thesis/Dissertation/Project Assessment, Ebonyi State University, Abakaliki

8. 2007 – Oct. 2008: Member, Management Committee, Ebonyi State University, Abakaliki

9. Aug. 2006 – Oct. 2010: Member, Committee of Deans & Directors, Ebonyi State University, Abakaliki

10. August 2006 – Date: Member, University Senate, Ebonyi State University, Abakaliki

11. 2006 – Oct. 2008: Member, Central Accreditation Committee, Ebonyi State University, Abakaliki

12. Feb. 2008 – Oct. 2008: Member, Library Board, Ebonyi State University, Abakaliki

13. Jan. 2008 – Oct. 2008: Member, Senate Committee on Examination Misconduct, Ebonyi State University, Abakaliki.

14. Jan. 2008 – Oct. 2008: Member, Senate Committee on Curriculum, Ebonyi State University, Abakaliki

15. Jan. 2008 – Oct. 2008: Member, Senate Committee on Sports, Ebonyi State University, Abakaliki

16. Feb. – Sept. 2006: Coordinator, Biotechnology Programme, Dept. of Biochemistry / Biotechnology, Ebonyi State University, Abakaliki.

17. May 2006 – Dec. 2007: Chairman, Consultancy Committee, Faculty of Applied Natural Sciences, Ebonyi State University, Abakaliki

18. July 2006 – Oct. 2008: Chairman, Curriculum Review Committee, Department of Biochemistry / Biotechnology, Ebonyi State University, Abakaliki

19. April 2007 – date: Member, Ebonyi State Team for the Implementation of the Alternative Energy Resource from Rice husk in partnership with the United Nations Industrial Development Organization (UNIDO).

20. Jan.2005 – April 2006: Secretary, Parish Pastoral Council, St. Paul's Catholic Church, University of Calabar, Calabar.

21. Sept. 2003 – April. 2004: Leader, Liturgy Group, Prince of Peace Catholic Church, Tsukuba, Ibaraki Pref., Japan.

22. 1996: President, International Association of Research Scholars & Fellows (IARSAF), International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria.

23. 1994: Chairman, National Association of Cross River State Students (NACRISS) Multipurpose Committee, University of Ibadan.

24. 1992 – 1993: Special Duties Minister, Tafawa Balewa (Postgraduate) Hall, University of Ibadan, Ibadan.

25. 1991 -1992 Cathechist / Ag. PRO, St. Paul's Catholic Church, University of Calabar.

26. 1990 – 1991: Head, Dept. of Agriculture, Folk Technical College, Ikwo, Ebonyi State.

Travels. Extensively to most parts of Nigeria and other parts of the world including Benin Republic, Cairo, Paris, Johannesburg, Bangkok, Japan and Australia.

Membership of Learned Academic / Professional Societies

1999 -2001: Japanese Grassland Society
1999 – 2001: Japanese Society of Plant Breeding
1999 – 2003: Crop Science Society of America
2005 – Date: European Association for Research in Plant Breeding (EUCARPIA)
2006 – Date: Biotechnology Society of Nigeria

Masters & Doctoral Thesis Supervised

A.1: M.Sc. (Odinachi Nweke) 2006-2009 (Graduated)
A.2: M.Sc. (Friday Titus Emmanuel) 2007-2010 (Graduated)
A.3: M.Sc. (Okolie Jerome) 2006-2010 (Graduated)
A.4: M.Sc. (Ukachi RoseMary) 2007 – 2011 (In view)
B.1: Ph.D (Friday Nweke Nwalo) 2006-2011 (Graduated)
B.2: Ph.D (Celestine Afiukwa) 2006-2011 (Graduated)
B.3: Ph.D (Edu Ndem) 2006-Present
B.4: Ph.D (Oko Augustine Ukpani) 2007-2011 (Graduated)

Publications

A: Unpublished Thesis

1. Ubi, B. E. (1998) A linkage map of cowpea [*Vigna unguiculata* (L) Walp.) based on random amplified polymorphic DNA (RAPD) markers. Ph.D. Thesis, University of Ibadan, Nigeria, 197p.

B1. Journal Articles in Learned International Journals

1. Nweke, F. N., Ubi, B. E. and Kunert, K. (2011) Application of microsatellite polymorphisms to study the diversity in seed oil content and fatty acid composition in Nigerian sesame (*Sesamum indicum* L.) accessions. African Journal of Biotechnology, In Press.

2. Ubi, B. E., Efisue, A. A. and Oselebe, O. H. (2011) Diversity of drought stress tolerance response in rice cultivars and breeding lines at the vegetative stage. Journal of Agriculture, Biotechnology and Ecology 4 (3): In Press.

3. Nweke, F. N., Ubi, B. E. and Kunert, K. (2011) Simple Sequence Repeat Polymorphisms in Nigerian sesame (*Sesamum indicum* L.) cultivars and its relationship with morpho-agronomic traits. Journal of Crop Improvement, In Press.

4. Afiukwa, C. A., Kunert, K. J., Voster, J. B., Cullis, C. A., and Ubi, B. E. (2011) Application of microsatellites to study diversity in seed protein content and flowering time in Nigerian cowpea cultivars. African Journal of Biotechnology, In Press.

5. Ubi, B. E., Y. Ban, H. Sakamoto, A. Ito and T. Moriguchi (2010) Molecular cloning and characterization of dormancy associated MADS box genes during dormancy transition phases in Japanese pear (*Pyrus pyrifolia*) *Journal of American Society of Horticultural Sciences* 135(2):174-182

6. Efisue, A. A., , A. A., P. Tongoona, J. Derera, B. E. Ubi and H. Oselebe (2009) Genetics of morpho-physiological traits in segregating populations of interspecific hybrid rice under stress and non-stress conditions. *Journal of Crop Improvement* 23: 383-401

7. Ban, Y., Kondo, S., Ubi, B. E., Honda, C., Bessho H., and Moriguchi, T. (2009) UDP-sugar biosynthetic pathway: contribution to cyanidin 3-galactoside biosynthesis in apple skin. *Planta* 230 (5): 871-881.

8. Efisue, A. A., P. Tongoona, J. Derera and B. E. Ubi. (2009) Screening Early-Generation Progenies of Interspecific Rice Genotypes for drought-stress Tolerance During vegetative phase. *Journal of Crop Improvement* 23(2): 174-193

9. Efisue, A. A., P. Tongoona, J. Derera, A. Langyintuo, M. Laing and B. E. Ubi. (2008) Farmers' perceptions on rice varieties in Sikasso region of Mali and their implications for rice breeding. *Journal of Agronomy and Crop Science* 194(5): 393-400

10. Efisue, A. A., B. Ubi, P. Tongoona, J. Derera, M. Laing (2008). Performance of diverse rice genotypes based on seed set in interspecific hybrid production: implications for plant breeders. *Journal of New Seeds* 9(2):128-144

11. Ubi, B. E., Ibiam, U.-A., Efisue, A. A., Odu, E. M., Udeh, K. L., and Egesi, C. I. (2008) Variation in leaf cyanide content among cassava genotypes. *Journal of Agriculture, Biotechnology and Ecology* 1(1): 62-69

12. Ubi, B. E. (2007) Molecular mechanisms underlying anthocyanin biosynthesis: a useful tool for the metabolic engineering of the flavonoid pathway genes for novel products. *International Journal of Food, Agriculture & Environment* **5(2)**: 83-87

13. Ubi, B. E., C. Honda, H. Bessho, S. Kondo, M. Wada, M. Kita, S. Kobayashi and T. Moriguchi (2006) Expression analysis of anthocyanin biosynthetic genes in apple skin: effect of UV-B and temperature. *Plant Science* **170**: 571-578

14. Takos, A. M., B. E. Ubi, S. P. Robinson and A. R. Walker (2006) Condensed tannin biosynthesis genes are regulated separately from other flavonoid biosynthesis genes in apple fruit skin. *Plant Science* **170**: 487-499

15. Hao, Y.-J., Z. Zhang, H. Kitashiba, C. Honda, B. Ubi, M. Kita and T. Moriguchi (2005) Isolation and functional characterization of *S-adenosylmethionine decarboxylase* genes in apple. *Gene* (Functional Genomics Section) **350**:41-50

16. Ubi, B. E., M. Fujimori, Y. Mano and T. Komatsu (2004) A genetic map of rhodesgrass based on an F_1 pseudo-testcross population. *Plant Breeding* **123**: 247-253

17. Ubi, B. E. (2004a) The genetics of anthocyanin reddening in apple fruit skin. *International Journal of Food, Agriculture & Environment* **2(1)**: 163-165

18. Ubi, B. E. (2004b) External stimulation of anthocyanin biosynthesis in apple fruit skin. *International Journal of Food, Agriculture & Environment* **2(2):** 65-70

19. Ubi, B. E., R. Koelliker, M. Fujimori and T. Komatsu (2002) Genetic diversity in diploid populations of rhodesgrass (*Chloris gayana* Kunth) determined on the basis of amplified fragment length polymorphism markers. *Crop Science* **43**: 1516-1522

20. Li, C.-D., C. A. Fatokun, B. Ubi, Bir B. Singh and G. J. Scoles (2001) Determining Genetic similarities and relationships among cowpea breeding lines and cultivars by microsatellite markers. *Crop Science* **41**: 189-197

21. Ubi, B. E., H. Mignouna and G. Obigbesan (2001) Segregation for seed weight, pod length and days to flowering following a cowpea cross. *African Crop Science Journal* **9(3)**: 463-470

22. Ubi, B. E., M. Fujimori, M. Ebina and T. Komatsu (2001) Amplified fragment length polymorphism analysis in diploid cultivars of rhodesgrass (*Chloris gayana* Kunth). *Plant Breeding* **120**: 85-87

23. Ubi, B. E., H. Mignouna and G. Thottappilly (2000) Construction of a molecular linkage map and QTL analysis using a recombinant inbred population derived from an intersubspecific cross of cowpea (*Vigna unguiculata* L.). *Breeding Science* **50**: 161 – 171

24. Ubi, B. E., M. Fujimori, M. Ebina, Y. Mano and T. Komatsu (2000) AFLP variation in tetraploid cultivars of rhodesgrass (*Chloris gayana* Kunth) *Grassland Science* **46 (3-4):** 242 – 248

25. Eneji, A. E., B. E.Ubi and A. A. Agboola (1997a) Effect of fertilizer application and cropping pattern on the performance of cassava + sweet potato intercrop. African Journal of Root and Tuber Crops **3(1):** 24-27

26. Eneji, A. E., A. A. Agboola and B. E. Ubi (1997b) Effect of farmyard manure and NPK fertilizer on growth and yield of maize + sweet potato intercrop in South-western Nigeria. *Revista di Agricultura Subtropical e Tropicale* **91(1)**: 63-78

C. Monograph

1. Ubi, B. E. (2008) Genetic markers and their utility in plant breeding. *Journal of Agriculture, Biotechnology and Ecology*, Monograph Series (no. 1, April 2008) Beijing Chenxi Color Printing Co. Ltd., China, 45p.

D: Articles / Extended Abstracts Published in Conference Proceedings

1. Ubi, B. E. (2011) Emerging gene technologies for overcoming drought and flooding constraints: perspectives for sustainable rice production in sub-saharan Africa in the face of increasing climate change. Proceedings of the 24th Annual/1st International Conference of the Biotechnology Society of Nigeria, 21-25th August (2011) Joseph Ayo Babalola University (JABU), Ilesa – Osun State, In Press

2. Ubi, B. E. (2011) Rice breeding research: perspectives for a rice revolution in Nigeria. In: Ogunji, j. O. & Oselebe, H. O. (eds) Proceedings of Ebonyi State Rice Stakeholders Summit in furtherance of Ebonyi State University Industry engagement in rice agriculture case study. Ebonyi State University, Abakaliki, Nigeria, August 2, 2011, pp. 58-66.

3. Ubi, B. E. (2011) Research Design: Materials and Methods. Proceedings of the Workshop on Developing Award Winning Proposals / Assessing ETF Research Funds, Ebonyi State University, 15 – 16th March, 2011; Pp. 31 – 36.

4. Oselebe, H. O., Okporie, E. O., Okonkwo, C. I., Ubi, B. E., Idike, F. I., Nnamani, C. V. and Ibiam, S. A. (2009) Sustainable land management technologies and the enhancement of low carbon society in South-eastern Nigeria: a case study of Ebonyi State, Nigeria. Proceedings of the International Symposium Towards a Sustainable Low Carbon Society – Green New Deal and Global Change, Hokkaido University Sustainability Weeks 2009, Sapporro, Japan, 4-5th November, 2009, Pp. 175 – 182.

5. Ubi, B. E., C. Honda, S. Kobayashi, H. Bessho, M. Wada, M. Kita and T. Moriguchi (2004) The expression of anthocyanin biosynthesis genes in apple skin is induced by low temperature and UV-B light. *Journal of Japanese Society of Horticultural Science* **73** (Supplement 1): 64 (In Japanese)

6. Kitashiba, H., Y.-J. Hao, B. Ubi, M. Kita, C. Honda and T. Moriguchi (2004) Isolation of apple spermine synthase genes and the expression analysis in apple. *Journal of Japanese Society of Horticultural Science* **73** (Supplement 1): 64 (In Japanese)

7. Ubi, B. E. (2007) Organization of plant genome systems and their utilization in plant breeding. Proceedings of the Foundation for African Development through International Biotechnology (FADIB) held at Institute of Management & Training (IMT), Enugu, 5-7 November, 2007, pp. 40-44

8. Ubi, B. E. (2007) Bioinformatics: definition, scope and applications. Proceedings of the Foundation for African Development through International Biotechnology (FADIB) held at Institute of Management & Training (IMT), Enugu, 5-7 November, 2007, pp. 27-30

9. Fatokun, C. A., H. D. Mignouna, L. E. N. Jackai, B. Ubi, M. Knox and T. H. N. Ellis (1997) Insect resistance in cowpea: progress in cowpea genome mapping. Annual collaborator's meeting, IITA-JIC-NRI Gatsby funded Biotechnology Projects (Extended Abstract), 7-9 February, 1997, IITA, Nigeria, p.8.

10. Ubi, B. E., T. Komatsu and M. Fujimori (2000) AFLP-based analysis of genetic diversity in diploid and tetraploid cultivars of rhodesgrass (*Chloris gayana* Kunth). Proceedings of the Plant and Animal Genome VIII Conference held in San Diego, California, USA, 9-12 January, 2000.

11. Ubi, B. E., T. Komatsu and M. Fujimori (2000) The potential of AFLP technique for genome analysis in rhodesgrass. Molecular Breeding of Forage Crops 2000, Australia 19-24 November 2000, Program & Book of Abstracts, p.97

12. Honda, C., Ubi, B. E., Ban, Y., Beshho, H., Wada, M., Kobayashi, S. and Moriguchi, T. (2006) Identification of anthocyanidin synthase gene promoters in apples. Third International Rosaceae Genomics Conference (HortResearch), New Zealand, 19-22 March, 2006; Book of Abstracts, p.123 (Functional Genomics Section)

13. Ubi, B. E. (2006) Occupational Health and biosafety issues: Implications for biotechnology Research in Nigeria. Paper Presented at the 19th Conference of the Biotechnology Society of Nigeria (BSN) in Jos (Plateau State), 15-18, 2006

E. Technical Reports presented at Funded Projects Scientific Meetings

1. Ubi, B. E., Walker, M. and Robinson, S. (2002) Manipulation of anthocyanins in apples to produce novel products. AH01015: KEY GENES FOR HORTICULTURAL MARKETS (MILESTONE REPORT). CSIRO Plant Industry / AusHort / AgWest Technical Meeting in Merbein, Victoria, Australia, 18 June, 2002.

F. Editorship of National Conference Proceedings:

1. Ogunji, J. O., Ubi, B. E. and Oselebe, H. O. (2008) Proceedings of the 20th Annual Conference of the Biotechnology Society of Nigeria, Idealway Publishers, Enugu. 142p.

G. Books / Training Manuals

1. Ene-Obong, E. E., Ubi, B. E. and Afangideh, U. (2006) A first course training manual for plant tissue culture and molecular biology. A publication of the Dept. of Genetics & Biotechnology, University of Calabar, Calabar, 59p.

H. Editorship of Journals

1. Editor (Food and Agricultural Biotechnology Section), Nigerian Journal of Biotechnology, February 2006 – date.

2. Review Editor, Journal of Applied Natural Sciences, Faculty of Applied Natural Sciences, Ebonyi State University, Abakaliki, March 2006 – date

3. Review Editor, Journal of Information, Communication and Technology (JICCOTECH), c/o. ICT Centre, Ebonyi State University Abakaliki, July 2006 – date

INVITATION AS INTERNATIONAL CONFERENCE SPEAKER

EUCARPIA Leafy Vegetables Conference at University of Warwick, United Kingdom, April 18-20, 2007 to make a presentation on 'Analysis of the need for biotechnology research on African Indigenous leafy vegetables' cf. http://www.warwick.ac.uk/accessibility

Extra Curricular Activities / Hobbies: Classical music, Tennis, Swimming, Chess, Cycling and Football

REFEREES

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