

# Ikechukwu Eugene ONAH (PhD)

## Lecturer I

Department of Zoology and Environmental Biology, University of Nigeria, Nsukka, Enugu State, Nigeria

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**Phone Numbers:** +2348064618073, +2348028030763

**Expertise:** Insect Biosystematics, Biodiversity, Ecology, Molecular Biology, Forensic Entomology and Bioinformatics

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**Date of Birth:** February 8, 1982

**Permanent Home Address:** No 38A Obollo Road, Nsukka, Enugu State, Nigeria

## EDUCATION

- 2012 – 2015**      **PhD in Zoology (Entomology)**  
Department of Zoology and Environmental Biology  
Faculty of Biological Sciences, University of Nigeria, Nsukka
- 2010 – 2011**      **M.Sc. in Zoology (Entomology)**  
Department of Zoology and Environmental Biology  
Faculty of Biological Sciences, University of Nigeria, Nsukka
- 2003 – 2007**      **B.Sc. (First Class Honours) in Zoology (Entomology)**  
Department of Zoology and Environmental Biology  
Faculty of Biological Sciences, University of Nigeria, Nsukka

## TRAINING AND WORKSHOPS

### **2012 Molecular Biology and Biotechnology**

#### **Experiences:**

- Polymerase Chain Reaction (PCR) Techniques
- Extraction of Genomic DNA from Organisms
- Plasmid Extraction from Organisms
- Restriction Enzyme Digestion of amplified fragments of DNA
- Gel Electrophoresis

#### **Other Laboratory Experiences:**

- DNA amplification and sequencing
- Sequence data analysis
- DNA barcoding
- Phylogenetic analysis

- Using restriction fragment polymorphism to infer species relationships
- Bioinformatics

## **2012 University of Nigeria Microsoft ICT Staff Training**

### **Experiences:**

- Microsoft office words
- Microsoft office power point
- Microsoft access
- Microsoft Excel
- Management and storage of data in data base, etc

## **2006 – 2007 Afrihurb Training Institute, University of Nigeria, Nsukka**

**Accomplishment:** Certificate in Computer Proficiency

### **PRIZE/AWARD**

- ❖ Vice Chancellor's Award, Best Graduating Student, Department of Zoology, University of Nigeria, Nsukka  
2006/2007

### **COMMUNICATION SKILLS:**

- ❖ Good communication skills in English gained through training in schools, teaching and listening to news and social media

**Fellowship:** Insect Biosystematics and Molecular Biology, Applied Entomology and Zoology Laboratory, Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan (**Sponsored by TETFund**) **April 2013 to February 2014**

### **Accomplishments during the fellowship:**

- Established PCR-RFLP patterns based on COI gene for identification of exotic and native tephritid fruit flies in Nigeria
- Barcoded the tephritid fruit flies of horticultural crops in Nigeria
- Constructed the phylogenetic relationships of tephritid fruit flies in Nigeria based on 658 bp COI gene, and 1,427 bp comprising COI, tRNA Leucine and COII genes
- Integrated the molecular and morphological systematic of invasive fruit flies in Nigeria

- Barcoded and accessed the molecular phylogeny of false codling moth *Thaumatotibia leucotreta* infesting sweet oranges in Nigeria

## **EXPERIENCE (NYSC)**

**2008 -2009                      Division of Fruit Programme (Crop Protection)  
National Horticultural Research Institute, Ibadan, Nigeria**

### **❖ Responsibilities:**

- Insect Collection and Identification (Insect Systematics)
- Setting up of experimental plots.
- Collection and documentation of insect pest data on experimental plots.
- Monitoring the chemical ecology of insect pest population dynamics.
- Rearing of insect pests and parasitoids in the laboratory for biological control.

## **WORK EXPERIENCE**

**2015 – Date                      Lecturer I, Department of Zoology and Environmental Biology,  
University of Nigeria, Nsukka**

### **❖ Responsibilities:            Teaching and Research Lecturing and Demonstration of Practical for:**

- ZEB 331 Basic Entomology
- ZEB 313 Animal Histology
- ZEB 361 Basic Animal Molecular Biology
- ZEB 363 Basic Animal Biotechnology
- BIO 352 Cytogenetics
- ZEB 301 Chordate Zoology I
- ZEB 401 Chordate Zoology II
- ZEB 411 Animal Developmental Biology
- ZEB 431 Entomology I: Insect Bionomics and Systematics
- ZEB 432 Entomology II: Insect Molecular Biology and Phylogeny
- ZEB 402 Ethology
- ZEB 403 Taxonomy and Evolution
- ZEB 453 Conservation and Wildlife Management
- ZEB 481 Animal Genetics and Molecular Biology
- ZEB 453: Wildlife Conservation and Park Management

**❖ Supervision of Undergraduate Research Projects**

**❖ Supervision of Undergraduate Seminars**

**❖ Teaching and Supervision of M.Sc. Students**

**At Masters' level (M.Sc. courses taken)**

- ❖ ZEB 630: Insect Biodiversity, Evolution and Climate Change
- ❖ ZEB 635: Medical, Veterinary and Forensic Entomology
- ❖ ZEB 637: Insect Ecology and Forensic Science
- ❖ ZEB 651: Ecological Methods
- ❖ ZEB 652: Advanced Animal Ecology

**2012 – 2015                      Lecturer II, Department of Zoology and Environmental Biology,  
University of Nigeria, Nsukka**

**Responsibilities:            Teaching and Research  
   Lecturing and Demonstration of Practical for:**

- ZEB 331 Basic Entomology
- ZEB 313 Animal Histology
- ZEB 361 Basic Animal Molecular Biology
- ZEB 363 Basic Animal Biotechnology
- BIO 352 Cytogenetics
- ZEB 301 Chordate Zoology I
- ZEB 401 Chordate Zoology II
- ZEB 411 Animal Developmental Biology
- ZEB 431 Entomology I: Insect Bionomics and Systematics
- ZEB 432 Entomology II: Insect Molecular Biology and Phylogeny
- ZEB 402 Ethology
- ZEB 403 Taxonomy and Evolution
- ZEB 453 Conservation and Wildlife Management
- ZEB 481 Animal Genetics and Molecular Biology
- ZEB 453 Wildlife Conservation and Park Management

- ❖ **Supervision of Undergraduate Research Projects**
- ❖ **Supervision of Undergraduate Seminars**

**2011 – 2012                      Assistant Lecturer, Department of Zoology and Environmental  
Biology, University of Nigeria, Nsukka**

**Responsibilities:            Teaching and Research  
   Lecturing and Demonstration of Practical for:**

- ZEB 331 Basic Entomology
- BIO 154 General Biology Practical
- BIO 152 General Biology II
- BIO 151 General Biology I
- ZEB 313 Animal Histology
- BIO 352 Cytogenetics

- ZEB 301 Chordate Zoology I
- ZEB 401 Chordate Zoology II
- ZEB 411 Animal Developmental Biology
- ZEB 431 Entomology I: Insect Bionomics and Systematics
- ZEB 432 Entomology II: Insect Molecular Biology and Phylogeny
- ZEB 402 Ethology
- ZEB 403 Taxonomy and Evolution
- ❖ **Supervision of Undergraduate Research Projects**
- ❖ **Supervision of Undergraduate Seminars**

**2009 – 2011**                    **Graduate Assistant, Department of Zoology and Environmental Biology, University of Nigeria, Nsukka**

**Responsibilities:**        **Research and demonstration of practical**

#### **MEMBERSHIP OF ACADEMIC SOCIETIES**

- ❖ Member Entomological Society of Nigeria
- ❖ Member Zoological Society of Nigeria
- ❖ Member Foundation for African Development through International Biotechnology

#### **MEMBERSHIP OF FACULTY STANDING ACADEMIC COMMITTEE**

- ❖ Member Examination Committee Faculty of Biological Sciences, University of Nigeria, Nsukka 2010 to 2012.
- ❖ Member Scholarship Committee Faculty of Biological Sciences, University of Nigeria, Nsukka 2010 to date.
- ❖ Member ICT Committee Faculty of Biological Sciences, University of Nigeria, Nsukka 2012 to date.
- ❖ Member Time Table Committee Faculty of Biological Sciences, University of Nigeria, Nsukka 2012 to date.
- ❖ Member Faculty Entrance Committee Faculty of Biological Sciences, University of Nigeria, Nsukka 2012 to date.
- ❖ Member Curriculum Committee Faculty of Biological Sciences, University of Nigeria, Nsukka 2012 to date

## PUBLICATIONS:

1. **Onah, I. E.**, Eyo, J. E. and Taylor, D. (2017). Application of PCR-RFLP of COI gene for identification of life stages of *Bactrocera dorsalis* and *Ceratitidis anonae* infesting citrus in southeastern Nigeria. *African Entomology*, 25(2): (In press)
2. **Onah, I.E.**, Taylor, D., Eyo, J.E. and Ubachukwu, P.O. (2016). Identification of False Codling Moth *Thaumatotibia Leucotreta* (Meyrick) (Lepidoptera: Tortricidae) Infesting Sweet Oranges in Nigeria by DNA *Barcoding*. *Proceedings of the Entomological Society of Washington*, 118(4): 574-581
3. Okpasuo, O. J., Ezenwaji, N. E., **Onah, I. E.**, Ekeh, F. N. and Ngwu, J. I. (2016). Parasites of Freshwater and condition factor of bagrid fishes in Anambra River Basin, Nigeria. *International Journal of Pharmacy and Biological Sciences*, 6(4): 13-26.
4. **I.E. Onah**, J.E. Eyo & D. Taylor (2015). Molecular identification of tephritid fruit flies (Diptera: Tephritidae) infesting sweet oranges in Nsukka Agro-Ecological Zone, Nigeria, based on PCR-RFLP of COI gene and DNA barcoding. *African Entomology*, 23(2): 342–347
5. Joseph Effiong Eyo, **Ikechukwu Eugene Onah**, Patience Obiageli Ubachukwu, Njoku Ivoke and Felicia Nkechi Ekeh (2014). Effect of climatic conditions on the biting density and relative abundance of *Simulium damnosum* complex in a rural Nigerian farm settlement. *Annals of Agricultural and Environmental Medicine*, 21(4): 699 – 702.
6. Joseph Effiong Eyo, Felicia Nkechi Ekeh, Njoku Ivoke, Chinedu Ifeanyi Atama, **Ikechukwu Eugene Onah**, Ngozi Evelyn Ezenwaji and Chika Bright Ikele (2014). Survey of tick infestation of cattle at four selected grazing sites in the tropics. *Global Veterinaria*, 12(4): 479 – 486.
7. Felicia Nkechi Ekeh, **Ikechukwu Eugene Onah**, Chinedu Ifeanyi Atama, Njoku Ivoke, and Joseph Effiong Eyo (2013). Effectiveness of botanical powders against *Callosobruchus maculatus* (Coleoptera: Bruchidae) in some stored leguminous grains under laboratory conditions. *African Journal of Biotechnology*, 12(12): 1384 – 1391.
8. Joseph E. Eyo, Lilian O. Nwachukwu, **Ikechukwu E. Onah**, Chinedu I Atama, Felicia N Ekeh, Ngozi E Ezenwaji and Njoku Ivoke (2013). Effects of aqueous root extract of *Vernonia amygdalina* on the haematological profile of *Rattus norvegicus*. *Advances in Life Science and Technology*, 11: 19 – 35.
9. Atama C.I., Okeke O.C., Ekeh F.N., Ezenwaji N.E., **Onah I.E.**, Ivoke N., Onoja U.S. and Eyo, J.E. (2013). Length-weight relationship and condition factor of six cichlid (Cichlidae: Perciformis) species of Anambra River, Nigeria. *Journal of Fisheries and Aquaculture*, 4(2): 82 – 86.

10. Ekeh, FN, Ekechukwu, NE and **Onah, I.** (2008). Arthropod pests of dried fish and fish by –products in a tropical urban community market. *Animal Research International*, **5(3)**: 900 – 903.

## CONFERENCES ATTENDED AND PAPERS PRESENTED

### INTERNATIONAL CONFERENCES

1. **Ikechukwu Eugene Onah** and DeMar Taylor (2013). PCR-RFLP patterns of COI gene established for accurate and rapid identification of *Bactrocera invadens* and *Ceratitidis* spp. infesting sweet oranges in Nigeria. **UNESCO-APIED International Symposium on Agricultural Education for Sustainable Development, Tsukuba Japan.**
2. **Ikechukwu Eugene Onah** and DeMar Taylor (2013). PCR-RFLP patterns of COI gene established for accurate and rapid identification of invasive tephritid fruit flies infesting sweet oranges in Nigeria. **Leading Graduate School International Conference, Tsukuba Global Science Week.**

### NATIONAL CONFERENCES

1. **Entomological Society of Nigeria, EKO 2015**  
**Onah, I. E.**, Taylor, D. and Eyo, J. E. (2015). Integrative morphological and molecular systematics is indispensable in species identification: the case of *Bactrocera invadens* syn.n. *Bactrocera dorsalis* (Diptera: Tephritidae) in Nigeria
2. **Foundation for African Development through International Biotechnology**  
**Onah, I. E.**, Taylor, D., Eyo, J. E., Ubachukwu, P. O., Ekeh, F. N. and Okwor, J. I. (2015). Genetic data denied evidence of species delimitations among morphological variants of *Bactrocera invadens* syn.n. *Bactrocera dorsalis* (Diptera: Tephritidae) in Nigeria.
3. **Entomological Society of Nigeria, ABUJA 2014**  
**Onah, I.E.**, Eyo, J.E., Ubachukwu, P.O. and Haruna, S.A. (2014). Insect resistance to insecticide is the key to insect resurgence: a case study of *Periplaneta americana* (Dictyoptera: Blattidae) in households
4. **Entomological Society of Nigeria, EDO 2012**  
Ekeh, F.N., **Onah, I.E.**, Atama, C.I., Nwani, C.D. and Eyo, J.E. (2012). Use of plant products as oviposition deterrent of *Callosobruchus maculatus* on some leguminous grains.

5. **Parasitological and Public Health Society of Nigeria, Benin 2011**  
**Onah, I. E.**, Ubachukwu, P. O. and Eyo, J. E. (2011). Studies on the infectivity and transmission potentials of *Simulium damnosum* complex in Uzo-Uwani LGA of Enugu State, Nigeria.
  
6. **Zoological Society of Nigeria, Ibadan 2011**  
**Onah, I. E.**, Eyo, J. E. and Ubachukwu, P. O. (2011). Effect of climatic conditions on the biting density and relative abundance of black flies (*Simulium damnosum* complex) in Adani, Uzo-Uwani LGA, Enugu State, Nigeria.