



NEWSLETTER



50TH ANNIVERSARY EDITION

A Publication of the Entomological Society of Nigeria

HUMAN INTERFERENCE

(Urbanization and Industrialization):

Consequences on Insects and Human Health

Rapid development activities have been associated with more and more exploitation of various natural resources as technological advancement has resulted in fast depletion of non-renewable energy resources, mainly coal and petroleum, and also various minerals. Urbanization and industrialization have interfered with the ecological balance of nature due to large scale impact. The species of environment is it plants or animals have an influence on the environment they live in and in turn get influenced by the same. A proper balance has to be maintained between the magnitude of influences and it is being maintained too by the plant and animal species, except for MAN. In simple terms there are over interference of humans on the environment. The main cause for this interference can be blamed on the ever increasing scientific knowledge of man. With this knowledge he is able to modify the environment to suit his needs. Firstly, the misconception we all have is that this over interference by humans is a phenomenon dated back to maybe only a few decades but very few of us realize that this has been happening from the very beginning of human civilization; for instance, early man killing animals few for food, few for safety (fierce animals). Now, what we see is man destroying forests because of increased demand for land for various other purposes like industrialization, urbanization and agriculture.

Destruction of forests not only decreases the number of trees from the earth's surface but it also destroys the habitat of thousands of insects and other arthropods. Industrialization though benefits man by increasing his standard of living it is having a negative impact on the environment. Industries and factories are known to release hazardous chemicals and wastes into rivers which in turn is leading to pollution. Here it can be clearly noticed how this interference of humans is affecting various parts of the

continue on page 12

FROM ESN PRESIDENT

The 46th Annual Conference of the Society holding in the University of Lagos (6-9 October, 2015) coincides with the 50th anniversary of Entomological Society of Nigeria (ESN). From 1965 when the Society was established, only four conferences were omitted till date. These years of its existence have been



characterized with steady growth and development. In all the conferences, a theme is normally chosen that emphasizes at various times, the importance of insects in all aspects of human endeavor including climate change.

This year, the conference "Eko 2015" has the theme "Urbanization and Industrialization: The interfering influence on insects, public health and environment". The keynote address speaker is Mr. Olumide Onakoya, a former executive chairman of Mobil Oil Nigeria Plc.

Insects are found everywhere even in petroleum. They affect public health and changing climatic conditions modify their behavior. Today in northern Uganda, entomologists are trying to solve the problem of Tsetse flies which cause sleeping sickness among the residents and communities along the river banks. The host, an insect like mosquitoes, is the target of entomologists like us who have the knowledge of their control and management.

Our Society today is legally registered with the Corporate Affairs Commission of the Federal Republic of Nigeria. The Society has well over five hundred members with twenty active branches, fifty three fellows, thirty nine honorary fellows and eleven presidents from inception. These entomologists specialize in various aspects of insect studies: Morphology, Taxonomy, Systematics, Physiology, Toxicology, Ecology, Bionomics, Behaviour, Crop protection, Entomology/Economic Entomology/Pest Management, Extension and Regulatory Entomology, Medical/Veterinary Entomology, Storage Entomology and Forensic Entomology.

It is gratifying to note today that the Society has retired N4m of the TETFund grant for publication of our journal.

In marking our fifty years of existence, it is our desire now to have a high impact journal with open access.

Let me welcome everyone with joy to this unique conference in which we shall share reminiscences of our Society which we revere.

Professor Dan A. Enobakhare, FESN, KSM
National President

Inside Issues:

EDITORIAL



Urbanization and Industrialization: The interfering influence on insects, public health and environment

Humans alone have the potential to gather resources from beyond their immediate surroundings and process them into different and more versatile forms. This has made humans to thrive and flourish beyond natural constraints. Primitive humans used natural resources to satisfy their basic needs of air, water, food and shelter. These natural and unprocessed resources were readily available in the biosphere, and the residues produced by

the use of these resources were generally compatible with or easily assimilated by the environment.

Improvement over the traditional practice in terms of the various activities by man have led to urbanization and industrialization which produces anthropogenic (man-induced) pollutants that overloaded the system, and interferes with the well being of flora and fauna. The resultant effects of this is the distortion of natural equilibrium of the ecosystems in terms of emergence of different kinds of pests and disease causing organism, resurgence of pests and diseases of public health interest and climate change.

With the dawn of the industrial revolution, humans were better able than ever to satisfy their needs for air, water, food and shelter. So, humans turned their attention to other needs beyond those associated with survival. The industrial production, distribution and use of different forms of products usually results in more complex residuals and/or wastes, many of which are not compatible with or readily assimilated by the environment. As the acquired needs (or luxuries) increase so will the complexity of the production chain, and mass and complexity of the pollutants generated.

Urbanization entails development of infrastructures such as housing, good roads, parks, dams and a host of others that alters the natural environmental factors and result to negative impact on the health of the residents. The physical and chemical properties of particulates are associated with health risks such as respiratory problems, skin irritations, eyes inflammations, blood clotting and various types of allergies.

In addition, the impact of mankind on biodiversity has clearly been detrimental to many fauna (insect and other arthropods) and human health, but the story is more complex and subtle than has been appreciated. Urbanization provides ready-made laboratories for studying evolution and adaptive processes, and examining the influence of humans on flora and fauna creates the potential to mitigate any negative effects. Entomologists should be more positive about our relationship with the natural world: We should celebrate the creative aspects of our impact on insects and other arthropods in addition to concerning ourselves with the negative effects by proffering empirical researches that can produce results which will be adopted to mitigate problems caused by urbanization and industrialization.

Of note is the fact that, it is not all bad news as many animal (insect and other arthropods) and plant species have adapted to the new stresses, food sources, predators and threats in urban and suburban environments, where they thrive in close proximity to humans. Their success provides researchers with valuable and sometimes unexpected insights into evolutionary and selective processes.

By **Dr A.A. Oyerinde**
oyerindehyphae2002@gmail.com

Reference:

- FEPA, 1992. Transition to Sustainable Development in Nigeria
- FEPA, 1992. Decree No. 86 - Environmental Impact Assessment Decree 1992
- FEPA, 1994, Environmental Impact Assessment Procedure.



2015 ESN NATIONAL EXECUTIVE COUNCIL

Prof D.A. Enobakhare (FESN, KSM)
President

Dr K.A. Kemabonta
Vice President

Prof M.O. Ashamo FESN
National Secretary

Dr A.A. Oyerinde
Asst. Sec/PRO/Chairman, Abuja branch

Prof A.M. Oparaeke
Business Manager

Dr A.M. Malgwi
Treasurer/Chairman,
Yola/Jalingo/Mubi branch

Prof B. D. J. George
Editor-in-Chief

Prof A.A. Adesiyun FESN
Trustee

Dr O. Ajayi FESN
Trustee

Prof S.S. Ogbogu FESN
Co-opted member

Prof S.C. Ewuim
Chairman, Awka branch

Prof E. A. Omudu
Chairman, Makurdi/Yandev/Lafia branch

Prof S.B.A. Umeotok
Chairman, Calabar/Uyo branch

Dr V.C. Adaigbe
Chairman, Benin/Ekpoma branch

Prof W.A. Makanjuola FESN
Chairperson, Lagos branch

Prof. A. Idowu
Chairman, Abeokuta branch

Dr S.A. Dialoke
Chairman, Owerri branch

Prof R. S. Adamu
Chairman, Zaria/Kaduna branch

Prof T.T. Epidi
Chairman, Port Harcourt/Yenagoa branch

Prof G.S. Mwansat
Chairperson, Jos/Vom branch

Dr I.N. Kolo
Chairman, Bida/Minna branch

Prof. A. T. Ande
Chairman, Ilorin/Ogbomosho branch

Dr S.R. Yusuf
Chairman, Kano branch

Dr Sosan
Chairman, Ile-Ife branch

Dr J.O. Akinneye
Chairman, Akure branch

Dr K.O.K. Popoola
Chairman, Ibadan branch

Dr T.N.C. Echendu
Chairman, Umudike/Umuahia branch

Dr M.A. Yahaya
Chairman, Sokoto branch

Dr B. D. J. Kabir
Chairman, Maiduguri branch

ESN NEWSLETTER EDITORIAL CREW

Oyerinde, Akeem Abolade, Ph.D
Editor

Prof. M. O. Ashamo
Prof. Omoloye Adebayo A.,
Consulting Editors



**PRESIDENTIAL ADDRESS DELIVERED AT THE
45th ANNUAL CONFERENCE OF THE ENTOMOLOGICAL
SOCIETY OF NIGERIA AT UNIVERSITY OF ABUJA 7-10 OCTOBER 2014**

**Professor Dan A, Enobakhare, FESN, KSM
Department of Crop Science
Faculty of Agriculture University of Benin, Benin City**

Protocol
Distinguished Ladies and Gentlemen
Fellow Entomologists

I am delighted to welcome you all on behalf of Council and the esteemed members of the Entomological Society of Nigeria to the 45th Annual Conference of the Society holding in Abuja, the City of Unity. This conference marks the 49th anniversary of the Society which precedes the golden jubilee celebration in Lagos next year. The tenure of one term of two years in office for some executive members of the Society you elected in October 2012 in Benin, will expire before the close of this conference. Consequently, there will be an election for the posts of President, Vice President, Secretary, Asst. Secretary/PRO and Treasurer. We thank you immensely for your cooperation and understanding.

Golden Jubilee Celebration of ESN, October 2015

A proposal, considered and approved by Council, has been made for the Golden jubilee celebration of our Society in 2015. It will be recalled that in my 2013 Presidential address gave a chronology of the Foundation of ESN.

Entomologically speaking, our highly esteemed professional Society (ESN), with the broad objective to "further the study of insects in Nigeria" started with the "egg-phase" in a holo /hemimetabolic setting in October 1965. Its inaugural meeting was held in the Department of Zoology at the University of Ibadan (Balogun, 1995 Presidential address). It is on record that one Dr A.D, Pickott, Head of International Capsid Research Team, Cocoa Research Institute, Ghana delivered an inaugural address titled "the Ecological Approach to the Solution of Pest Problems in Agriculture".

The proposed celebration shall feature

1. Publication and Launching of ESN (Anniversary edition) journal.
2. Past Presidential addresses at annual conference
3. Historical profile of ESN
4. Launching of permanent site of ESN Secretariat
5. ESN commemorative stamp
6. Specialized fora
7. Awards, among others.

Over the years, the Society has grown astronomically and in 2015, would have conducted forty-six (46) annual conferences having missed only four (4) since its existence. As at today, ESN has seventeen (17) active branches and three (3) moribund nationwide with four hundred and ninety-one (491) registered members, twenty four (24) life members, fifty-three (53) Fellows (FESN), thirty-nine (39) honorary Fellows and eleven (12) presidents. **ESN Fellows (FESN)**

The FESN award is given to deserving members of the Society every 2 years. There was none in 2012 and 2013 conferences in Benin and Yenagoa respectively,

In this conference, two eminent entomologists will be awarded Fellowship having been screened using approved criteria and recommended to Council for approval by FESN Award committee after ratification by the Board of ESN Fellows as provided by our Constitution in Article XVI P. 13.

Members of the Committee of FESN Award chaired by the veteran Dr Olupomi Ajayi, independently scored nominated candidates from branches using the approved criteria. Scores were collated by the Committee with Professors Emmanuel O. Ogunwolu, Thomas Ofuya, Adeyinka Adesiyun as members.