



NEWSLETTER

A Publication of the Entomological Society of Nigeria

PRESIDENTIAL BRIEF

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The Entomological Society of Nigeria (ESN) was established in 1965, 59 years ago. It started in Ibadan with 34 founding members. Its major objectives is to promote the Science and Art of Entomology in all its ramification to express the Society reviews on National issues as they relate Entomology and allied fields and to produce learned publications and other information materials to advance the cause of Entomologists.

The importance of insects to the well being of the nation has been fully enunciated, particularly in Agriculture, Health and the Environment. Insect pests are one of the major constraints to adequate food production in Nigeria. Yield losses due to insect pest infestation on crops ranged from 30 – 100% (Dike 2005). Insects are also incriminated as vectors of human disease such as Malaria, yellow fever, Filariasis, Myasis, Diarrhoea, Dysentery, Typhoid, Oncocerciasis and sleeping sickness. Tse tse fly, ticks and mites are vectors of livestock diseases. Agricultural and Medical Entomologists are working hard over the years to address the problems of insects pests of crop and to improve and safeguard crop yields and improve productivity and health of livestock.

Members of Entomological Society of Nigeria are engaged in teaching, research work, extension and other activities to solve National Challenges Connected to Insect Fauna and related Pests for National Development.

The Society has published compendium of pesticides used in Nigeria which was officially launched as the most authoritative document regarding to the Pesticides being sold and used in Nigeria.

The Society has more than 1500 registered members derived from Academia, research, teaching, ministries, parasitatal, seed companies, pesticides companies and farmers etc.

The Society was allocated one hectare of land at University of Abuja for building of its National Secretariat and Insect Museum.

However only partial fencing of the land has been carried out due to the paucity of fund, members were levied for the development of the project, however the response to the payment was below 25% of the registered members.



The Society has set up a three-man committee on the proposed establishment of the Institute of Entomology the committee has submitted its. Preliminary reports, another 5 men committee was let up by the congress to fine tune the reports and make contact with relevant stakeholders and authorities. It will submit its report during the next conference.

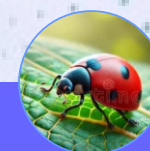
The Society holds its annual conference annually in October. Through these annual conferences, Entomologists communicate their findings to colleagues, interact, network and update their knowledge in Entomology.

Apart from hosting conferences the Society publishes its journal, Nigerian Journal of Entomology (NJE) which is of international repute. The journal was first published in 1974 to replace ESN former publication, Bulletin of Entomological Society of Nigeria. The current volume of the journal is vol. 40 No. 1 (January – June) and No. 2 (July – December) 2024. The Society also publishes the ESN Directory of Nigerian Entomologists which be updated in 2025. The current leadership has revived the publication of ESN Newsletter after it was rested for six years. Henceforth the newsletter will only be available only as electronic copy. Branches members and cooperate organization are expected make submissions.

I would like to appeal to all members to update their financial status, to pay up the secretariat levy and the annual dues. The branches are integral part of the Society. Members should identify with their branches, attend meetings and contribute to the mentoring of young upcoming Entomologists.

Long live the Entomological Society of Nigeria, Long live Nigeria.

Prof. R. S. Adamu
President ESN





MY OWN STORY OF ACHIEVEMENTS AND CONTRIBUTIONS TO ENTOMOLOGY:

WHO IS PROFESSOR GEORGINA SAMUEL MWANSAT alias GSM?..... Passionate about the things I do, committed to excellence and determined to achieve set objectives....

From a background in Biochemistry and Zoology, I'm currently, a Professor of Entomology, having just completed my tenure as Director, Directorate of Students Industrial Work Experience Scheme (SIWES), University of Jos, Plateau state, Nigeria.

My skill set is a combination of academic (research/teaching/community service), administrative and communications expertise, honed over a 33-year period of professionalism and mentorship, working as:

i. Senior Research Officer, National Horticultural Research Institute (NIHORT) Ibadan Nigeria.

ii. Assistant General Manager at an export oriented commercial farm (Sebore Farms Adamawa state Nigeria).

iii. Lecturer in entomology, Modibo Adama University, Adamawa State.

iv. Lecturer (currently Professor for 13 years), University of Jos, Plateau State.

Topmost among my numerous scientific and professional achievements, I fondly remember:

1. My PhD studies on prolonged laboratory rearing of *Neoseiulus ideaus* (Denmark and Muma) (Acari: Phytoseiidae), one of the five predacious mites (Acarina) used for the biological control of the introduced cassava green mite, *Mononychellus tanajoa* (Bondar) (Acari: Tetranychidae). My candidate species *Neoseiulus ideaus* from Colombia South America was one of the species selected, imported into Nigeria, mass reared and released in cassava growing areas of Africa. This study was part of an Africa-Wide biological control program of the cassava green mite situated at the International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria.

2. I was the Pioneer Director of the A. P. Leventis Ornithological Research Institute (APLORI), University of Jos, the only Ornithological Research Institute in Nigeria and the West African region. In the six years as Director (2002 – 2008), I laid a strong academic foundation that helped take the institute to the illustrious height it has attained today. Insects as prey for many bird species are the first non-ornithological ecological research to be carried out at the APLORI. These researches produced several scholarly publications eg, Akwashiki et al (2007); Olaniyan and Mwansat (2007) and Mwansat, Dibal and Chaskda (2007), to mention a few.

3. My diverse works at APLORI prominently on insects' succession and distribution of Raptors due to fire treatment management tool in Yankari National Park Northeast Nigeria is a significant achievement in species conservation. The study showed that



species had declined in the Park since 2008 and that there was higher abundance and diversity of the species in the reserve than the surrounding unprotected farmlands that suffer intense annual fire episodes. Furthermore, early burning was shown to support diversity of insect and bird species and was suggested and is currently being used as a fire treatment management tool within the Park (Onoja et al, 2014; Da'an et al, 2015).

4. My work with USAID and the Nigerian Federal Ministry of Health on control of Malaria vectors using different methods has helped to reduce the burden of malaria in both rural and urban centers in Nassarawa and Plateau states of Nigeria since 2011. Through this platform, most of my later years' mentees (who are currently practicing entomologists) were successfully trained. This is still on going.

5. Our detailed work on the incidence of malaria vectors in Benue state and the Mambilla Plateau, Taraba State produced eight (8) peer reviewed journal articles that are widely cited across continents. (Aju-Ameh et al, 2016; Aju-Ameh et al, 2017a; Aju-Ameh et al, 2017b; Aju-Ameh et al, 2017c; Garba et al, 2017; Garba et al, 2018a; Garba et al, 2018b; Garba, 2020).

The aforementioned work experiences have given me opportunities to provide successful academic mentorship and managerial and administrative leadership to the various Offices and University Senate Committees that I am privileged to be appointed member. And in mentorship, i try my best to be genuinely interested in my mentees. I also strongly believe that regardless of how they may present at the point of starting the relationship, they can be transformed given the requisite support. With this understanding I have not relented in committing my resources to mentoring. These to me are key lessons that in my professional journey so far.

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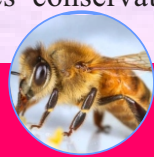
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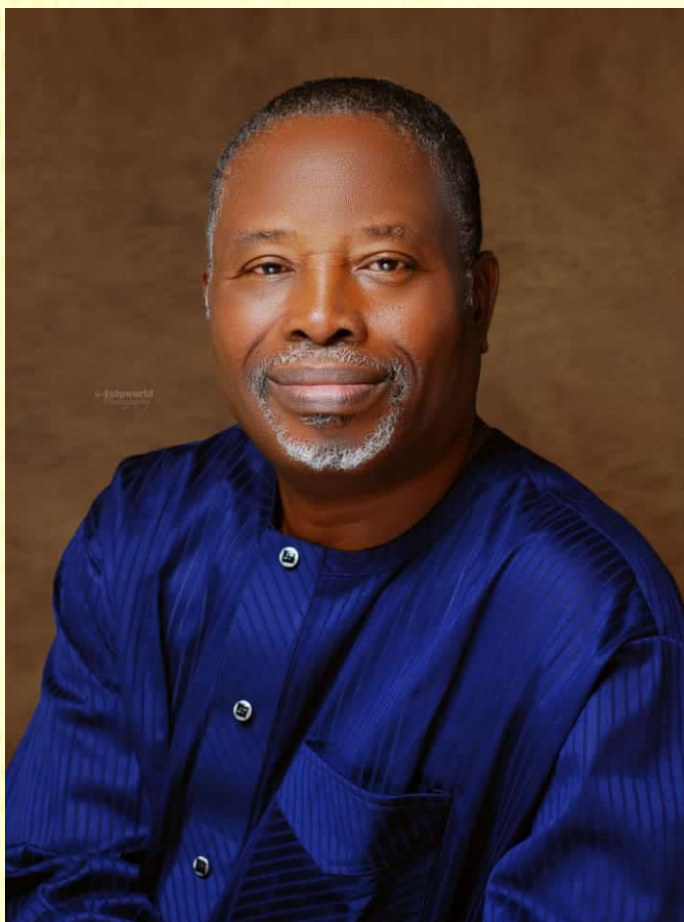
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EXPERIENCES AND SUCCESSES IN APPLYING ENTOMOLOGICAL PRINCIPLES TO REAL WORLD PROBLEMS

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Introduction

Human society has benefited much from the scientific study of insects, or entomology. When used properly and intelligently, entomological principles can help resolve some of the most difficult issues facing the actual world. Early starting, patience, discipline, keenness, a thorough awareness of nature, procedural rigours, not being bias, doing what is right, resilience and adaptability are often the foundations of entomologists' experience and success. These ideas are briefly describe below:

Early Start: Establishing the Foundation

For the record, many entomologists who have achieved successes have been interested in insects since they were little. This is sustained by early exposure to science and environment. Long-term dedication is necessary for entomology, and early starters typically gain a thorough understanding of the physiology and behavior of insects.

Patience: A Crucial Virtue

Insect research frequently necessitates hours of rigorous data gathering and observation. By their very nature, insects have different timetables than human beings. As an illustration, pollinator studies can require waiting days or weeks to witness particular activities, such as mating or feeding. From experience, this perseverance is frequently well worth it and a virtue to cultivate as entomologist. This virtue has helped me when counting the number of eggs laid by the cowpea seed bruchids on infested cowpea seed.

Discipline: The Backbone of Success

The careful application of scientific methodologies and the capacity for long-term research projects are characteristics of being an entomologist. Discipline is a virtue that cannot be over emphasized in being an entomologist. Over the years, I have trained myself to be disciplined to be able to achieve some rigorous methodologies in achieving the end of long waiting

research period. The discipline imbibe over the years, has bred a thoroughness which ensures a trustworthy results, enabling me to focus more on a future research.

Keenness: The Enthusiasm That Drives Discovery

The passion for being an entomologists have frequently transcends me from the laboratory or classroom. This passion fuels lifelong learning and the pursuit of creative answers to pressing issues. This keenness has gingered in me to foster a good relationship with communities, farmers, and policymakers and work passionately as a member of a multidisciplinary team to carry the gown to town in order to address global issues like food security and sustainable agriculture, by sharing knowledge in several seminars and workshops.

Understanding Nature and Matter: The Basis of Practical Solutions

Understanding of entomology knowledge has also increased my understanding of nature and related matter, thus providing practical solutions to solving storage pest problems. By comprehending the intricacies of insect physiology, I have been able to manage stored product pests using a wide range of biopesticides particularly oil extracts from some edible essential plant products.

Procedural Rigours: The Importance of Methodical Approach

Like any other science, entomology relies on following the right processes to produce accurate results. Whether conducting controlled laboratory tests or correctly identifying species, a procedural approach guarantees that research findings that may be replicated and utilized. Inaccurate conclusions, poorly thought out regulations, or inefficient pest management techniques might result from improper practices.

Not Being Bias: Objectivity in Research

In entomology, success is based on scientific objectivity. As an entomologists, being impartial is a key to ensure an accurate studies be it studying the effects of climate change, controlling pests, or

preserving endangered species. Thus, information to be obtained must be truthful, especially when it deviates from accepted wisdom or social norms. This is because biases can hinder scientific advancement and ultimately diminish the efficacy of entomological applications, whether they be in favour of or against particular techniques or technology.

Doing what is right: Ethical Responsibility

In carrying out entomological researches, I have made efforts over the years to ensure that I followed ethical conundrums. For instance in the application of biopesticides that are often used on stored products, ethical responsibility should be taken in to consideration to ensure that human being that will use or eat the products are considered. Hence, in doing this, products that can cause health hazards are avoided. The objectives have always be to "do the right thing" by making sure that research has a sustainable and responsible impact on people and the environment.

Life of Resilience:

Entomologist often face barrage of problems. These could be unforeseen difficulties in the field, budget reductions, or the unpredictable changes in nature. However, the ability to adjust and keep going in spite of these challenges is essential to forge ahead. To find a workable answer, entomologists must be persistent, learn from mistakes and improve upon methods being developed.

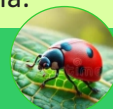
Adaptability to the Environment:

I have learnt to adapt to changes occurring in the field of entomology in the face of climate change. For instance, the rise of exotic species such as Tomato leafminer (*Tuta absoluta*), Fall Armyworm (*Spodoptera frugiperda*), habitat degradation and climate change provide ever-changing issues. Because of these developments, as an entomologists there is need to be ready to adjust research techniques and technology. Adaptability aids in both understanding evolving trends and creating effective intervention plans.

MEMBER SPOTLIGHT: ACHIEVEMENTS AND CONTRIBUTION TO ENTOMOLOGY – PROFESSOR TAMBEKE NORNU GBARAKORO (JP) (Environmental Entomology)

Trof. Tambeke Nornu Gbarakoro, a distinction division one candidate of WAEC, 1979, graduated B.SC Zoology and M.Phil applied Entomology from Rivers State University of Science and Technology (new Rivers State University), Port Harcourt in 1985 and 1995, respectively. He had a PhD in Environmental Entomology and pest management (2010) and appointed professor (2023) by the University of Port Harcourt, Nigeria. He is a co – author of a book titled Insecta and other Higher Invertebrates and has published over 42 scientific articles and 6 book chapter in reputable local and international journals. He has been in the employment of University of Port Harcourt since 2007 as assistant lecturer, rose through the ranks to professorial cadre, and has supervised numerous undergraduate and postgraduate student's projects. He is happily married with a wife and blessed with three loving children. He is presently the vice president of ESN.

Professor T.N. Gbarakoro research interest span from the use of soil microarthropods (insects and mites) in detecting, monitoring and researching changes in the ecosystem caused by disturbances such as pollution, e.t.c. to the response of it's biodiversity, species richness and relative abundance to the ecosystem changes. The scope of his research has extended to the impact of the disturbances on the functional diversity of soil fauna, particularly soil microarthropods and it's impact on the ecosystem services, and overall performance of the ecosystem. He has further proffer solutions through research on the remedies to be adopted in ecosystem that have reduced soil fauna biodiversity, and ecosystem services. In this development, he has been recently working on the conservation of beneficial soil microarthropods using formulated organics and it's application in hydrocarbon – stressed soil ecosystem. He has also conducted studies on the impact of artisanal refinery activities on some fresh water bodies in the Niger Delta region, Nigeria.





Continuation from pg 3...

Contributions to Entomology

1. His work is a pioneer one that revealed some mites as indicators of ecosystem health in hydrocarbon polluted environment. He showed that some mite species that belong to Cryptostigmata and Mesostigmata did not recolonize the polluted habitat, approximately 8yrs post – pollution. He suggested that some mites can be used as bioindicators in the monitoring and assessment of changes in terrestrial ecosystems in the oil pollution – prone Niger Delta.
2. His pioneer work showed that oil pollution adversely affected species diversity and significantly reduced abundance and density. Some mite species were tolerant to oil pollution, while a substantial number were very sensitive and were absent in the polluted habitats.
3. He has identified soil microarthropod indicators of Hydrocarbon pollution in the Niger Delta region, Nigeria.
4. He has conducted biodiversity Audit of soil fauna, and its application in the assessment of changes in the ecosystem.
5. Reported on soil fauna functional diversity of soil ecosystem and functional status of soil impacted by hydrocarbon pollution.
6. He has assessed and reported the ecosystem services of soil ecosystem impacted by hydrocarbon pollution, using biodiversity of soil microarthropods.
7. He has made contribution in the area of using formulated organics to boost soil species richness and abundance of such soil microarthropods to facilitate ecosystem services. The formulated organics have been utilized in the remediation of hydrocarbon contaminated ecosystem, conservation/boosting of fauna biodiversity and improvement of their ecosystem dependent services. He has shown through research that soil microarthropods are ecosystem stabilizers.

Finally, Prof. Gbarakoro has used data obtained from species richness, abundance and functional diversity of fauna organisms, particularly, soil microarthropods with statistical analysis to determine soil quality of ecosystems, and its dependable ecosystem services. He has also shown that some species perform compensatory services in the absence of organisms that render such services due to disturbances. Soil microarthropods that play such services has been identified in the Niger Delta region of Nigeria.

HIGHLIGHTING THE SEEMINGLY GLOBAL BIASED GLOBAL BIODIVERSITY INFORMATION FACILITY INSECT OCCURRENCE DATA

Dr. Gideon G. Deme;
Biological Unit, Department of Science
Laboratory Sciences, Faculty of Natural
Sciences, University of Jos, Jos-Nigeria.
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Species occurrence records on databases have become important tools in assessing biodiversity. However, the exciting research opportunities presented by GBIF (www.gbif.org) may have resulted in biased occurrence records, which can impact our ecological research, biodiversity assessment, and global conservation efforts. Because the deterministic and idiosyncratic response of species to anthropogenic global climate change affects their distribution patterns, we can expect species to colonize and recolonize new and different environments. Given that the rates at which species are colonizing, being extirpated, and recolonizing may vary across different ecoregions, biodiversity assessments quantifying the level of biases in species occurrence records on global databases, such as GBIF, are needed to facilitate evidence-based application of these research outputs to maximize species conservation.

GBIF (www.gbif.org), one of the biggest international network and infrastructure databases funded by different governments in the world, is an open-access database about all types of life on Earth, freely available to anyone and anywhere to support scientific and environmental research to inform evidence-based decision-making on biodiversity conservation. This is because insect species are suggested to be declining globally. Since occurrence records of organisms (e.g., fungi, plants, insects, fishes, birds, and mammals) on databases, such as GBIF and other digital platforms have emerged as important tools in future conservation planning, entomologists have begun to increasingly use the occurrence data on these databases to understand processes governing biotic and abiotic interactions. However, the uniqueness of these databases as biological collection hubs for important biodiversity research has not overcome the challenges of possible bias of species occurrence records.

across continents.

Although GBIF records are gaining wide recognition, with more people across the world using and contributing data to this repository, it is clear that the continental insect biodiversity records are skewed (Fig. 1). For instance, GBIF has significant occurrence records of vector insect species globally, but Africa's occurrence records of vector insect species are poor, even with recent studies suggesting rising speciation and populations of vector-borne insect species influenced by multifarious environments. Thus, our knowledge of the insect species occurrence of continents with few biodiversity records might be limited. Given that our understanding of insect species occurrence records is not uniform within and among continents, the question of whether environmental perturbation is uniformly exacerbating insect species loss might be far from conclusive. This is because the influence of these environmental changes on insect biodiversity on the global, regional, and local scales varies differently. Globally, insect species populations are mostly impacted by increasing urbanization and global climate change or local habitat degradation. Additionally, within regional and/or local scales, insect species might be experiencing rises in abundance while others decline with increasing environmental changes. Thus, if we must support GBIF for global evidence-based conservation, there is a need for all to support a long-term, extensive, and systematic insect monitoring program to aggressively contribute to species occurrence records on GBIF. We caution that to achieve maximum output, this will likely involve taking different approaches based on the all-inclusiveness of diverse people, and habitat types, and balancing the needs of different species (Diamond et al., 2023). This can be achieved through interdisciplinary collaboration and data sharing by diverse groups across continents while improving and encouraging the use of social media in continents with few biodiversity records on GBIF.

Given that social media has emerged as a vital contribution in adding species occurrence records on global biodiversity repositories to inform conservation planning. Further, emerging technologies might be increasingly being employed in biodiversity conservation citizen science projects across different parts of the world. It would be of great

benefit to integrate these emerging technologies in biodiversity conservation. This can be done by training both scientists and non-trained scientists on how to use Artificial Intelligence (AI) and other emerging ecological modelling methods to develop digital methods that will drive conservation efforts. Because adequate knowledge to both scientists and non-scientists on the approaches to improve citizen science in

biodiversity conservation can support large-scale, long-term monitoring of species occurrences, behaviour and interactions. Considering that technologies can foster participant engagement, regardless of pre-existing taxonomic expertise or experience, and permit new types of data to be collected.

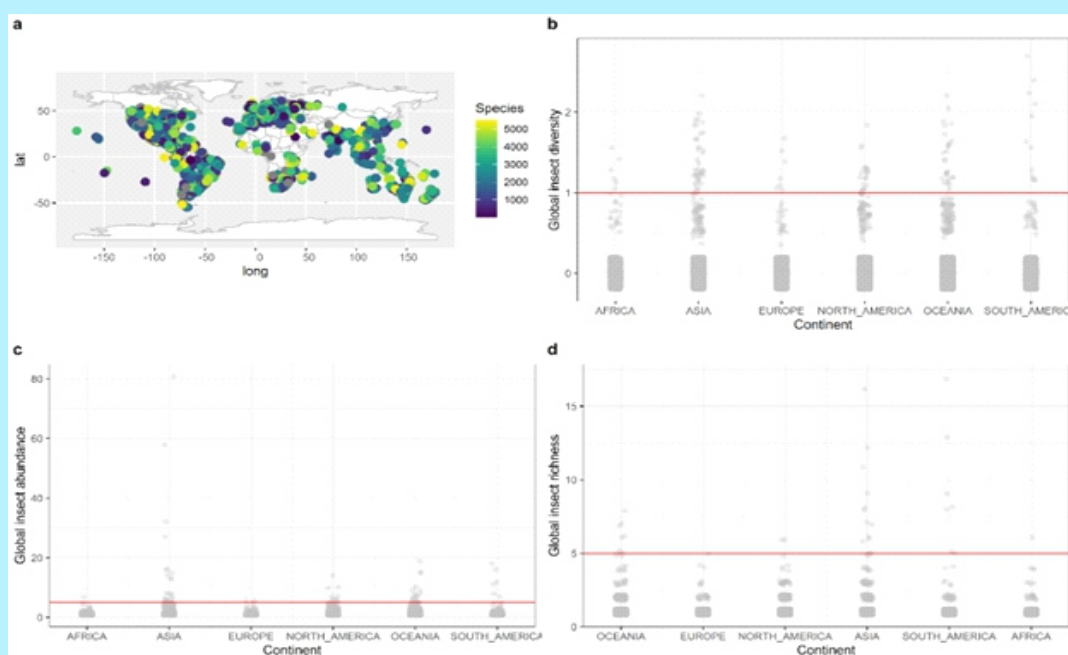


Fig 1. Global insect biodiversity using GBIF species occurrence records.

a) Insect species diversity across continents, b) Total number of insect species occurrence, as available on the GBIF database on 1st October 2023, c) change in insect species abundance across continents, and d) change in insect species richness





ENTOMOLOGICAL SOCIETY OF NIGERIA (ESN), KANO BRANCH

(Website: www.esn.org.ng)

8TH November, 2024

The National Secretary
Entomological Society of Nigeria (ESN)
National Headquarters, Abuja (FCT)
University of Abuja

Dear Sir,

KANO BRANCH REPORT 2024 PRESENTED TO THE NEWSLETTER EDITOR- NOVEMBER, 2024

1. **Number of meetings:** The ESN Kano branch had not met but frequently in touch via the branch's WhatsApp platform. The branch is always searching of new members from the newly established Universities and institutions within the branch.
2. **Major presentation:** The branch in collaboration with Women Farmers Advancement of Nigeria (WOFAN) is participating in a radio program to sensitize farmers on Integrated Pests Management (IPM).
3. **Trips/Excursion:** No trip/excursion made during the period of report.
4. **Branch Finances/Revenue drive:** At the moment, members are being encouraged to pay monthly dues and register with the national body of the ESN.
5. **New members/Membership drive:** At the moment, there is one member that registers with the National body from the branch. Moreover, the branch is always searching for new membership drive from other newly established Universities and institutions.
6. **Staff Promotions/Appointment:**
 - i) Professor A. U. Yusuf has been conferred with Fellow of the Nigerian Society for Plant Protection (NSPP) and was elected the National President of the society, **BUK - 2023**
 - ii) Dr. B. S. Wudil (Branch chairperson) was also elected as zonal coordinator of the Northwest zone of the society. These were all at the annual conference of the society hosted by the Bayero University, Kano **BUK – 2023**
 - iii) Dr. Baba Sani Wudil of Bayero University was promoted to the rank of Associate Professor of Agricultural Entomology, effective October, 2022.
 - iv) Dr. N. B. Sanda of the Department of Crop Protection, BUK and Dr. Audi Auwal Hassan were promoted to the ranks of Senior Lecturer and Associate Professor of Agricultural Entomology respectively, effective October, 2024.
 - v) **Dr. Shehu Abduljalal Dattijo** has been appointment as Director, Alumni & Advancement Directorate and member, Academic Board of Audu Bako College of Agriculture (ABCOAD), Dambatta Kano State
 - vi) Musa Garba has been appointed the Director Renewable Energy & Climate Change of the Audu Bako College of Agriculture, Dambatta Kano State. He was also elected Secretary General of the Academic Union of Polytechnics (ASUP) Audu Bako College of Agriculture (ABCOAD), Dambatta Chapter, Kano State

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ENTOMOLOGICAL SOCIETY OF NIGERIA (ESN), KANO BRANCH

(Website: www.esn.org.ng)

27th OCTOBER 2024

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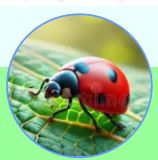
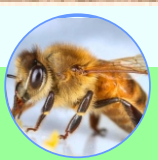
CELEBRATING TWO YEARS OF ADVANCING ENTOMOLOGICAL DISCOURSE AND RESEARCH THROUGH THE ESN AWKA/ENUGU/ABAKALIKI JOURNAL CLUB

We are delighted to mark the two-year anniversary of the Journal Club, a monthly academic discussion organized by the Awka/Enugu/Abakaliki branch of the Entomological Society of Nigeria (ESN). This initiative, held every 2nd Friday of each month, was born out of our commitment to create a vibrant community for early career researchers (ECRs) in Entomology, providing a collaborative space to discuss the latest advances, develop critical appraisal skills, and foster innovative research in our field. Our branch, consisting primarily of ECRs, saw the need for a regular platform to exchange ideas, gain insights, and connect with mentors and peers alike, hence the birth of this platform.

Over these past two years, our Journal Club has not only grown in participation but also achieved significant milestones. We are proud to highlight our partnership with e-Life, through which we served as a platform for their Early career Ben Barres Spotlight Award recipients to share their work, bringing cutting-edge research to our discussions and enhancing the academic experience for our members.

As we look to the future, we warmly invite more early career researchers, students, and all with a flaming interest in modern research in Entomology to join us. Your participation strengthens our shared commitment to advancing the frontiers of entomological science, and we look forward to welcoming you to our community. Here's to many more years of growth, discovery, and academic excellence!

For further enquiries, please send an e-mail to us at: vc.duru@unizik.edu.ng (Chairman, Journal Club)





CELEBRATING TWO YEARS OF ADVANCING ENTOMOLOGICAL DISCOURSE AND RESEARCH THROUGH THE ESN AWKA/ENUGU/ABAKALIKI JOURNAL CLUB





EFFECTS OF CASTOR LEAF POWDER IN MANAGING *TRIBOLIUM CASTANEUM* POPULATION

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Abstract

This study evaluated the efficacy of castor leaf powder (*Ricinus communis*) as a natural insecticide for controlling the population of *Tribolium castaneum*, a significant pest affecting stored maize grains. The experiment, conducted under controlled laboratory conditions, assessed insect mortality, repellence, grain damage, and weight loss over a 14-day period. Results showed a significant increase in insect mortality and repellence with higher concentrations of castor leaf powder. Grain damage was reduced from 90% in the control to just 5% at the highest concentration (15g), while weight loss decreased from 30% to 2%. The findings suggest that castor leaf powder is a viable eco-friendly alternative to synthetic insecticides for pest management in stored maize.

Keywords

Castor leaf, *Tribolium castaneum*, insect mortality, repellence, post-harvest losses.

1. Introduction

Maize (*Zea mays*) is essential for food security, but post-harvest losses due to pests like *T. castaneum* pose a significant challenge. Traditional pest management relies heavily on synthetic insecticides, which are associated with environmental pollution and health risks. This study investigates the potential of *Ricinus communis* leaf powder as an eco-friendly, natural alternative to synthetic insecticides for managing *T. castaneum* in stored maize.

2. Materials and Methods

The experiment was conducted at the Entomology Laboratory of Pest Management Technology, Samaru College of Agriculture, ABU Zaria. Castor leaves were collected, air-dried, and ground into powder, which was applied at concentrations of 5g, 10g, and 15g per 100g of maize grains. The insect population was sourced from established cultures. The study used a Completely Randomized Design (CRD) with three treatments and a control, each replicated three times. Key parameters such as insect mortality, repellence, grain damage, and weight loss were measured.

Table 1: Insect Mortality (%) at Different Concentrations of Castor Leaf Powder

Day	Control (%)	5g (%)	10g (%)	15g (%)
1	0%	10%	20%	30%
2	0%	25%	40%	50%
4	0%	40%	60%	75%
6	5%	60%	80%	90%
10	10%	75%	90%	95%

Table 2: Repellence Rate (%) of Red-rust Flour Beetle (*T. castaneum*) to the Applied Castor Leaf Powder

Concentration	Repellence (%)
Control	5%
5g	45%
10g	65%
15g	85%

Table 3: Grain Damage and Weight Loss

	Control (%)	5g (%)	10g (%)	15g (%)
Grain Damage	90%	40%	20%	5%
Weight Loss	30%	15%	8%	2%

3. Results and Discussion

The results demonstrate the significant effect of castor leaf powder in reducing *T. castaneum* populations and mitigating post-harvest losses. Mortality rates increased with higher concentrations of the powder, reaching 95% at the highest dose. Similarly, repellence increased, with 85% repellence observed at the highest concentration. Grain damage and weight loss were significantly reduced, confirming the powder's effectiveness as a natural insecticide.

4. Discussion

The findings highlight the promising insecticidal properties of *Ricinus communis* leaf powder. Higher concentrations of the powder effectively increased mortality and repellence while reducing grain damage and weight loss. These results align with previous studies on botanical insecticides (Isman, 2020), which show that plant-derived compounds can serve as sustainable alternatives to chemical pesticides. Castor leaf powder is particularly beneficial for smallholder farmers due to its accessibility and low cost. Moreover, its natural composition reduces the environmental and health risks associated with synthetic insecticides (Santos et al., 2020).

5. Conclusion

Castor leaf powder is a highly effective natural insecticide for controlling *T. castaneum* in stored maize. The significant reductions in insect infestation, grain damage, and weight loss suggest that castor leaf powder is a viable eco-friendly alternative to synthetic insecticides. The findings support the use of higher concentrations (e.g., 15g per 100g of grains) for optimal results, making castor leaf powder a promising tool for sustainable pest management.

6. Recommendations

- Castor leaf powder should be integrated into existing Integrated Pest Management (IPM) strategies.
- Further research should investigate the combined use of castor leaf powder with other natural insecticides for improved efficacy.
- Awareness campaigns should be organized to promote the benefits of using castor leaf powder as an eco-friendly pest control alternative.

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SLUM GUM: AN APICULTURAL BY-PRODUCT WITH HIDDEN POTENTIAL

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Background

Slum gum, a by-product after rendering of bee comb to bee wax, has been considered as an apicultural waste and is thrown away after wax production. It becomes a breeding site for several apicultural pests and such pests consequently attack healthy bee colony, resulting in either colony absconding or reduced honey yield. With an array of pests that attack bee colonies (Oyerinde & Ande, 2009; Babarinde et al., 2015; Peña-Chora et al., 2023; Parejo et al. 2024), any approach to reduce an upsurge of pest threshold is highly pertinent. Through our research at Ladoke Akintola University of Technology, Ogbomoso, two main uses of slum gum have been identified viz: usage as a bait to attract bee colony into hives (Babarinde et al., 2015) and its incorporation into animal feed (Babarinde et al., 2011; Ojebiyi et al., 2013); which presents slum gum as a partial bailout from the ever-increasing costs of animal feed. Therefore, we have been able to apply entomological practice to achieve the Sustainable Development Goal 2: End hunger, increase food security.

Production of Slum gum

Wax rendering was done as described by Segeren (1997) with slight modifications. After extraction of honey from the comb, the desired quantity of comb should be washed in clean water and loaded in a clean cheese cloth. The content should then be placed in sizeable pot on stone pebbles in the pot to prevent the comb from touching the bottom of the pot. Adequate volume of water should be added and the content should be heated till the comb melts around 80-100°C. The water and wax should then be decanted and sieved to separate the two contents. The left over is the slumgum (Babarinde et al., 2011). The average yield of slum gum after wax rendering was approximately 35% of the comb and the proximate composition is presented in Table 1.

Table 1: Proximate composition of honey bee Slum

Parameter	%
% Dry matter	90.4
Crude protein	9.37
Crude fibre	0.45
Ether extract	54.9
Ash	1.75
Nitrogen free extract	23.8

Source: Babarinde et al. (2011)

Potential of Slum gum

(a) Slumgum used as broiler feed ingredient

Honey bee slum gum meal (HBSM) was evaluated for maize replacement in broiler diets. HBSM was mixed with Maize in a ratio 1:4 and milled to obtain maize honey bee slum gum meal (MHBSM). Five diets were formulated where 0, 25, 50, 75 and 100% of maize was replaced by MHBSM in broiler starter and finisher diets. Data were collected on feed intake, weight gain, feed conversion efficiency, carcass characteristics and organ weight. Results showed that diet has no effect on the feed intake, weight gain and feed efficiency in the first two weeks. Between week 3 and 8, birds fed 0%, 25% and 50% MHBSM were comparable in terms of feed intake, weight gain and feed efficiency, while those fed 75% and 100% MHBSM showed significant ($p < 0.05$) depression with respect to the same parameters. It was concluded

that broiler chicks can tolerate up to 100% MHBSM (11.2% HBSM) in the first two weeks and up to 50% MHBSM (5.2% HBSM) up to the finishing phase (Babarinde et al., 2011)

(b) Slumgum used as rabbit feed ingredient

Another feeding trial was conducted to investigate the nutritional potential of HBSM on the performance characteristics of growing rabbit. Diet 1 had 0% inclusion of HBSM while 25 and 50% maize in diets 2 and 3 were replaced by HBSM, respectively. Rabbits received feed and water ad libitum during the 12-week experiment. The values obtained for final weight, carcass weight, abdominal fat, kidney, liver and lungs were significantly ($p < 0.05$) affected by dietary treatment. HBSM can be used as an alternative for substituting maize in growing rabbits diets up of 25% beyond which depression in performance was observed (Ojebiyi et al., 2013).

(c) Slumgum used as honey bee colony attractant

In another experiment, we evaluated four apicultural products (honey, bee wax, slum gum and propolis) for their potential to attract the African honey bee (*Apis mellifera adansonii*) colony into artificial hives and their effect on infestation by apicultural insect pests. Slum gum-baited hives were the first to be colonized (10 days post hive installation) (DPI), followed by bee wax (26.5 DPI). Bee wax however had the highest percentage hive colonization (66.67%) which was not significantly ($p > 0.05$) different from 33.33% observed in other apicultural products. In terms of total harvest, the performance of the different baiting materials was as follows: slum gum > bee wax > honey > propolis. Two ant species (*Oecophylla longinuda* and *Camponotus consobrinus*) were encountered at the pre-colonization stage in the hives baited with slum gum (Babarinde et al., 2015).

Observed challenges in slum gum research

On the use of slum gum as feed compliments, mixing the by-product with other feed ingredients is a major challenge. The by-product does not dry after days of sun-drying and milling it with other ingredients during feed formulation is a major bottleneck. Also, we noticed that mould developed in few lots of slum gum piled up for use at latter time.

Conclusion

Our future research will focus on the exploration of new potential of slum gum as feed supplements. We also intend to explore effective means of conservation of slum gum to exclude mould development and achieve sustainability. The potential of slum gum seems to receive reduced attention in the apicultural value chain due to lack of information and the bottlenecks of its usage. There is the need for concerted efforts to eliminate the challenges and promote its potential in the agri-food industry.

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INSECTS: UNLIKELY ADVERSARIES WITH HIDDEN RESERVOIRS OF POWER

Why is it that most people today view insects as pests? Could it be due to a lack of awareness about their nutritional value, pollination power, cultural significance, and other beneficial factor?

Insects: Unlikely adversaries with hidden reservoirs of power

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Insects play a crucial role as both primary and secondary decomposers. Without them to help break down and dispose of waste, dead animals and plants would accumulate in our environment, and someday, it would lead to a source of pollution. Insects are crucial components of many ecosystems, where they perform many significant functions. They aerate the soil, pollinate flowering plants to blossom and control insect and plant pests. Many insects, especially beetles, are scavengers, who feed on dead animals and fallen trees, thereby recycling nutrients into the soil. Insects are underappreciated for their role in the food web. They are the sole food source for many amphibians, reptiles, birds, and mammals. No doubt, life would become dull without the presence of butterflies or lighting beetles to add interest to our landscape. Humans benefit in so many ways by sharing their world with insects. There is an instruction from the Holy Bible in the book of Proverbs 6: 6-8(NIV). **"6Go to the ant, you sluggard; consider its ways and be wise. 7It has no commander, no overseer or ruler, 8yet it stores its provisions in summer and gathers its food at harvest."** In spite of this instruction, most people still perceive insects as agents of destruction which must be controlled or eradicated. We must always remember that the good done by the many beneficial insects far outweighs any bad caused by the few pest species.

Insects are major players in the food chain of a wide variety of animal species, such as spiders, lizards, and birds (Forister et al., 2019). They are invaluable as pollinators and they are also very important in the recycling of nutrients. To humans, they are

economically helpful in producing [silk](#), [honey](#), [shellac](#), and pollinating crops. However, insects, due to the diversity of their mouthparts, have survived and fed on varieties of crops and human resources or a seemingly endless array of foods (Labandeira, 1997). Many insects are omnivorous (they can eat a variety of foods, including plants, fungi, dead animals, decaying organic matter, and nearly anything they encounter in their environment). For this reason, insects are regarded as pests (which destroy many household properties), affect both cultivated and uncultivated plants and are perceived to constitute an environmental nuisance. There is a Yoruba Proverb that says, **'Kòkòrò tó ñ je èfó idí èfó nń gbé'** (the ant/bug that eats and destroys the vegetable is beneath the vegetable). Typical examples of such insect pests are grasshoppers, crickets, cockroaches, termites, lice, stink bugs, aphids, beetles, caterpillars and flies. While others are selective in their diets, which means they may rely only on particular plants or even specific parts of a particular plant to survive. A Yoruba Proverb says, **'Kokoro t'on jefo Jare efo, iwonba ni eweko n dara mo'** (one should not blame the insect for making itself a pest to plants/vegetables because even it also has eyes for beauty). Many insects are predatory or parasitic, either on plants or on other insects or animals, including humans. Such insects are important to help keep the pest population at a tolerable level. Predatory and parasitic insects are very valuable when they attack other animals or plants that we consider to be pests. As a result of the perceived nuisance and destruction caused by insect pests, people have, over the years, shown negative attitudes toward insects and have attempted to eliminate them from society (Schoelitz, et al., 2019). They do this by spending enormous amounts of money on insect pest management programs. For instance, approximately 34 million kg of broad-spectrum insecticides are manufactured and sold annually for household use. In addition, annual revenues from insecticide sales to house owners in 2004 were noted to exceed 450 million US Dollars, and this value is expected to double by 2030. Little do they know that, out of approximately 15 million described insect species, at most only 1,000 can be considered true pests, and fewer than 10,000 are occasional pests. (Stork, 2018). Crop damage and insect-borne diseases such as malaria have led to much effort in the control of insects. However, control measures must be

carefully evaluated, as many can backfire, destroying helpful insects as well, and negatively impacting animals that consume insects. Although more attention has been focused on the control or eradication of insect pests, little has been said about the opportunities or benefits that insects can offer. I wonder who remembers one of those primary school songs, we loved to sing-**'Yi ese re si apa kan—Mase pa kokoro ni. Kokoro ti iwọ ko le da, Qlọrun lo da'**. People need to understand that insects have several uses, including cultural, medicinal, and symbolic. The practical uses of insects in science and technology, textiles, warfare, and food cannot be overemphasized. However, the use of insects as food has not been fully explored, considering the problem of high food shortage and the expensive status of quality food in most developing countries, including Nigeria. It is pertinent to point out that combined world feed productions were estimated at 870 million tonnes as of 2011, with revenue from global commercial feed manufacturing generating approximately US\$ 350 billion globally. A report from the FAO estimates that production will need to increase by 70% to be able to feed the world in 2050 with a concomitant doubling effect on meat (pork, beef), egg and fish output (IFIF, 2012). Nutrition is the provision of cells and organisms, of the materials necessary (in the form of food) to support life. The diet of an organism is what it eats, which is largely determined by the perceived palatability of food. Acute shortage of animal protein has been reported by Shlio et al. (2005) to be the major challenge of most developing countries and this consequently leads to unbalanced diet and malnutrition (Owagboriaye, et al., 2015). According to the UN's Standing Committee on Nutrition, the largest single contributor to disease is malnutrition. The World Health Organisation (WHO, 1999) affirmed that the health situation in Africa, including Nigeria is characterized by a high rate of malnutrition, especially protein deficiency. Grover & Ee (2009) earlier affirmed that protein-energy malnutrition is affecting over 100 million people in Africa, with an additional 200 million people at risk. In emergencies, disease can often contribute to or be a direct result of malnutrition. From a clinical point of view, malnutrition is characterized by inadequate or





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INSECTS: UNLIKELY ADVERSARIES WITH HIDDEN...

excess protein, energy and micronutrients such as vitamins. This definition also includes the frequent infections and disorders that are the result of an inadequate balanced diet (Awuchi, 2020). Getting a balanced diet is quite expensive in developing countries such as Nigeria, and the abundance of low-cost sources of carbohydrates in the country has made such food types accessible and affordable for the masses, especially people experiencing poverty who cannot afford expensive foods containing protein. It is common knowledge that protein is a vital and important nutrient used in maintaining and repairing tissues for organisms to enable proper growth and development. However, the high cost of animal protein prompted the urgent need among the scientific community to research the development of alternative supplements or replacements for animal protein. We have, therefore, proposed insects as a good alternative.

The earliest mention of insect consumption was found in the Holy Bible. God, while giving rules on what may be eaten by the Israelites, said, **'Yet among the winged insects that go on all fours you may eat those that have jointed legs above their feet, with which to hop on the ground. Of them you may eat: the locust of any kind, the bald locust of any kind, the cricket of any kind, and the grasshopper of any kind'** (Leviticus 11:21 & 22; English Standard Version - ESV). Similarly, the Bible affirmed that man could survive by feeding on insects and their products alone. This was evident in the life of John the Baptist, who was a great prophet as described in Matthew 3:4 (ESV), which says, **'Now John wore a garment of camel's hair and a leather belt around his waist, and his food was locusts and wild honey.'** Similarly, McGrew (2014) showed that archaeological evidence and analysis of fossilized faeces proved that humanity has evolved into an insect-eating species. Chakravorty et. al. (2016) reported that insects are high in proteins ranging between 60%-70%, energy-giving nutrients, and various vitamins and minerals. Also, Selaledi et. al. (2021) opined that insects can form 5-10% of annual animal protein consumed by certain indigenous

people. Meena, & Meena (2021) reported that most species of Orthoptera, like grasshoppers, form part of the diet of some ethnic groups on all continents. The consumption of grasshoppers by the people of Ikare, Owo and Oka in Ondo state, Nigeria, was reported by Ademolu et. al. (2015) as a means of controlling its damaging effects. Most edible insects are cheap and available and can provide a good source of protein and minerals needed to complement cereal-based foods consumed in developing countries. Gorbunova & Zakharov, (2021) revealed that the level of proteins in insect species is generally higher than those of traditional sources of protein such as meat, dairy products and some seeds.

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INTEGRATED PEST MANAGEMENT IN THE ERA OF CLIMATE CHANGE AND INSECTICIDE RESISTANCE: AN ENTOMOLOGICAL IMPERATIVE FOR SUSTAINABLE AGRICULTURE IN NIGERIA

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Executive Summary

Nigeria faces intensifying challenges in agricultural pest management due to the compounded effects of climate change and rising insecticide resistance. This position paper advocates for a reimagined Integrated Pest Management (IPM) strategy grounded in entomological science, ecological sustainability, and adaptive innovation. Drawing on the latest research, it recommends strengthened policy frameworks, increased investment in IPM research, institutional capacity building, and interdisciplinary collaboration to ensure food security and environmental resilience.

INTRODUCTION

Agricultural productivity in Nigeria is under increasing pressure from a complex interplay of ecological stressors, particularly climate change and the rapid emergence of insecticide-resistant pest populations. These challenges are compounding the already fragile state of food security in the country, where agricultural systems support the livelihoods of over 70% of the population (FAO, 2023). The intensifying impact of climate variability, marked by erratic rainfall patterns, prolonged droughts, and rising temperatures—has significantly altered pest dynamics, expanding the geographic range and population densities of several key insect pests (Odeyemi *et al.*, 2021; Ochieng *et al.*, 2023). Concurrently, the over-reliance on synthetic insecticides has led to widespread resistance development, diminishing the efficacy of control measures and endangering both crop yields and environmental health (Abubakar *et al.*, 2022; IRAC, 2024).

In Nigeria, however, the implementation of IPM remains sporadic, with limited institutional support, inadequate farmer education, and insufficient alignment with the country's diverse agro-ecological zones (Eneh and Okoro, 2023). Given the evolving pest landscape and the urgency of ensuring national food security, this position paper advocates for a reimagined IPM strategy tailored to Nigeria's ecological realities. Such a strategy must be dynamic, evidence-based, and inclusive of innovations from entomological research, digital agriculture, and climate-smart technologies.

The Entomological Basis of Integrated Pest Management (IPM)

Integrated Pest Management (IPM) is a knowledge-intensive, ecosystem-based strategy that combines a suite of biological, cultural, physical, and chemical control methods in a manner that reduces risks to human health, non-target organisms, and the environment. The science of entomology underpins IPM by providing critical insights into insect morphology, physiology, behaviour, and ecological interactions—insights that are essential for the rational design and implementation of pest control measures (Pedigo and Rice, 2021; Obi *et al.*, 2022). At its core, IPM relies on the accurate identification of pest species and a comprehensive understanding of their life cycles and population dynamics.

An entomologically sound IPM approach seeks to exploit pest vulnerabilities—such as specific developmental stages or reproductive behaviours—while enhancing the conservation and utilisation of natural enemies like parasitoids, predators, and entomopathogens. For instance, augmentative biological control using native parasitoids has shown promise in managing *Maruca vitrata* and *Helicoverpa armigera* infestations in West African legumes, reducing pesticide reliance and preserving beneficial arthropod communities (Ahmed *et al.*, 2022; Onwubuya and Sani, 2020).

Climate Change and Its Impact on Pest Dynamics

Climate change has become a significant driver of emerging challenges in pest management, primarily by reshaping the ecology and behaviour of insect pests in agricultural systems. It alters the distribution, phenology, and reproductive cycles of insect pests. Changes in temperature, precipitation patterns, relative humidity, and extreme weather events are influencing the spatial distribution, phenology, reproductive rates, and survival of key pest species. Rising temperatures, irregular rainfall, and prolonged dry or wet seasons have shifted the dynamics of pests such as *Helicoverpa armigera*, *Spodoptera frugiperda*, and various aphid species in different agroecological zones. For instance, *Helicoverpa armigera* and *Spodoptera frugiperda* have shown increased voltinism and broader geographical ranges under warming scenarios (Aidoo *et al.*, 2022; Maina *et al.*, 2021). Warmer climates also enhance overwintering survival, enabling pests to persist in regions where they were previously absent (Deutsch *et al.*, 2022).

The most striking manifestation of climate-induced pest pressure is the rapid invasion and establishment of *Spodoptera frugiperda* (fall armyworm) in sub-Saharan Africa. Since its first detection in Nigeria in 2016, the pest has expanded aggressively across the continent, largely facilitated by favourable climatic conditions and limited natural enemies (Goergen *et al.*, 2020; FAO, 2023). Its invasion represents a major ecological shift, overwhelming conventional pest control systems and triggering food security concerns for staple crops such as maize and sorghum.

Given these dynamics, climate-smart pest management, anchored in predictive entomology, ecological monitoring, and resilient cropping systems is crucial to sustaining agricultural productivity. Understanding and anticipating pest responses to climate variables is no longer optional but imperative for designing adaptive Integrated Pest Management (IPM) frameworks in Nigeria and beyond.

The Growing Threat of Insecticide Resistance

Insecticide resistance poses a mounting threat to the sustainability of Integrated Pest Management (IPM) in Nigeria and other developing countries. Continuous and indiscriminate application of insecticides, particularly synthetic pyrethroids and organophosphates, has led to resistance in major pests such as *Maruca vitrata*, *Bemisia tabaci*, and *Sitophilus zeamais*. Resistance mechanisms, ranging from behavioral avoidance to metabolic detoxification, are evolving rapidly, undermining the reliability of conventional insecticides.

This trend not only threatens crop yields but also imposes higher economic burdens on smallholder farmers.

Over reliance on chemical pesticides, often driven by the quest for immediate pest knockdown, has led to resistance in several economically significant pests, thereby diminishing the efficacy of once-reliable chemical interventions. The frequent, indiscriminate, and suboptimal use of insecticides, particularly synthetic pyrethroids, neonicotinoids, and organophosphates, has been implicated in accelerating the evolution of resistance mechanisms among pest populations (Isah *et al.*, 2022; Sparks and Nauen, 2021).

Field-evolved resistance has been reported in *Maruca vitrata* (the legume pod borer), *Bemisia tabaci* (whitefly), and *Sitophilus zeamais* (maize weevil), among others, across major Nigerian agroecological zones (Odeyemi and Fasoranti, 2020; Ojo *et al.*, 2021). These pests exhibit a range of resistance mechanisms, including behavioural avoidance, enhanced detoxification via cytochrome P450 monooxygenases and glutathione S-transferases, reduced target site sensitivity (such as knockdown resistance mutations), and cuticular thickening that limits insecticide penetration (Bass *et al.*, 2023).

The implications of this growing resistance are manifold. For smallholder farmers, who constitute the backbone of Nigeria's agricultural economy, increased resistance translates to more frequent pesticide applications, higher input costs, and escalating environmental and health risks. Moreover, resistance undermines efforts to integrate chemical control with biological and cultural methods, thereby weakening the foundational principles of IPM (IRAC, 2023). In extreme cases, resistance has led to outright control failures, such as the ineffectiveness of lambda-cyhalothrin against *Maruca vitrata* in some parts of northern Nigeria (Kushwaha *et al.*, 2022).

The Need for an Adaptive IPM Framework

To remain viable in the face of accelerating ecological and socio-economic challenges, Integrated Pest Management (IPM) must transcend its conventional boundaries and transform into an adaptive, knowledge-driven system. This system should synthesise indigenous agronomic wisdom with cutting-edge entomological science to create flexible, context-specific pest management solutions. As climate variability, insecticide resistance, and pest invasions intensify, the next generation of IPM must become dynamic—grounded in real-time surveillance, local stakeholder engagement, and predictive modelling (Kogan and Jepson, 2023; Tonnang *et al.*, 2021).

Policy and Institutional Support

The successful implementation and sustainability of Integrated Pest Management (IPM) in Nigeria depend not only on scientific innovation but also on strong policy frameworks and institutional alignment. Currently, there is an urgent need for policy reforms that prioritise and fund entomological research, facilitate the local production and subsidisation of IPM-compatible tools, and strengthen regulatory mechanisms to monitor and restrict the misuse of synthetic pesticides (Van den Berg *et al.*, 2022; FAO, 2022). Without such systemic support, even the most advanced IPM innovations risk underutilisation or outright failure.





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INTEGRATED PEST MANAGEMENT IN THE ERA OF CLIMATE CHANGE AND INSECTICIDE RESISTANCE: AN ENTOMOLOGICAL IMPERATIVE FOR SUSTAINABLE AGRICULTURE IN NIGERIA

Institutions such as the **National Agricultural Extension and Research Liaison Services (NAERLS)**, the **Nigerian Stored Products Research Institute (NSPRI)**, and universities with agricultural faculties must assume leadership roles in operationalising IPM. These institutions are uniquely positioned to conduct region-specific pest risk assessments, pilot field-level interventions, and disseminate locally adapted IPM solutions through tailored extension services (Odeyemi and Momoh, 2021; Adediran *et al.*, 2023). Equipping extension personnel with up-to-date entomological knowledge and digital tools will ensure that IPM messages are not only consistent but also responsive to emerging pest scenarios.

In addition, the **Entomological Society of Nigeria (ESN)** must rise as a national thought leader by fostering inter-institutional collaboration, organising stakeholder platforms, and lobbying for increased investment in insect science and bioecological research. The Society's potential to shape national discourse on sustainable pest management can be further leveraged through policy briefs, technical bulletins, and its academic journal. ESN can also strengthen partnerships with regional and global networks to ensure that Nigerian IPM strategies are informed by the best available science (Noyes *et al.*, 2022).

Conclusion and Recommendations

The escalating challenges posed by climate variability and the growing incidence of insecticide resistance present a critical juncture for Nigeria's agricultural sector. Traditional, chemically dependent approaches to pest management are proving increasingly inadequate in the face of shifting pest dynamics, prolonged infestation cycles, and the emergence of resistant pest populations. Consequently, a paradigm shift toward an anticipatory, ecologically grounded, and research-driven framework, Integrated Pest Management (IPM), has become imperative.

Entomologists, as central actors in this transformation, must rise to the challenge by deepening scientific inquiry into pest biology, ecology, and climate interactions; promoting sustainable pest management tools; and providing technical leadership in stakeholder engagement and policy formulation. Simultaneously, institutional and governmental actors must forge enabling environments through forward-thinking policies, targeted investments, and collaborative extension platforms.

To actualise these goals, the following strategic recommendations are proposed:

- 1. Establishment of Regional Pest Surveillance and Early Warning Systems:** Develop and maintain decentralised, data-driven pest monitoring networks across Nigeria's agroecological zones. These should be equipped with digital tools and real-time diagnostic capabilities to predict pest outbreaks and inform timely interventions.
- 2. Increased Investment in IPM-Focused Research and Field Validation:** Prioritise and fund multidisciplinary research on pest ecology, alternative biocontrol agents, and locally adapted IPM solutions. Establish demonstration plots and participatory trials to facilitate knowledge transfer from research to farm practice.
- 3. Mainstreaming Climate-Smart Pest Management into National Agricultural Programmes:** Integrate adaptive IPM strategies into existing agricultural development policies such as the

National Agricultural Technology and Innovation Policy (NATIP) and the Agricultural Transformation Agenda, ensuring that pest management aligns with climate resilience goals.

4. Institutionalisation of Resistance Monitoring and Pesticide Stewardship: Establish protocols for routine resistance surveillance and enforce strict pesticide quality control and usage regulations. Strengthen regulatory bodies to curb the circulation of substandard products and promote responsible pesticide use through training and sensitisation campaigns.

5. Capacity Building for Farmers, Extension Workers, and Researchers: Enhance the technical capacities of stakeholders through continuous training on pest identification, threshold-based interventions, and environmentally sound pest control techniques. Farmer Field Schools (FFS) and participatory learning methods should be expanded and localised.

6. Policy Advocacy and Interdisciplinary Collaboration: Foster collaborative platforms among entomologists, agronomists, environmentalists, economists, and policymakers. The Entomological Society of Nigeria should play a leading role in promoting science-policy dialogue and shaping national pest management frameworks.

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ESN/0185	AKPAN, Edna A.
ESN/0186	ALHAJI, Baba Bida
ESN/0187	ALHASSAN, Tswako Maji
ESN/0188	ALIU, Augustine S.
ESN/0189	ANASO, Chinwe E. (Late)
ESN/0190	ARANNILEWA, Samuel Taiwo
ESN/0191	AWE, Omolara O.
ESN/0192	AYAKPAT, Henrietta Ngozi
ESN/0193	BABA, Jeremiah Danjumah
ESN/0194	CHEREN, Samuel
ESN/0195	CHUKWU, Stella Nwakaego
ESN/0196	DOSUNMU, Roberta T.
ESN/0197	MAILAFIYA, Duna Madu
ESN/0198	DUNGUM, Selzing
ESN/0199	EWUIM, Chima Sylvanus
ESN/0200	GBAYE, Olajire Ayodele
ESN/0201	GEORGE, Jonathan Butcher Danladi
ESN/0202	GWADI, Kaleson Wesley





ESN/0203	ILIYASU, Abubakar Sadiq
ESN/0204	IMANDEH, Godwikn Nyiutaha
ESN/0205	ISHAKU, Abubakar
ESN/0206	ISHUWA, Miriam Nguuma
ESN/0207	JAMES-RUGU, Naomi N.
ESN/0208	KABIR, B. G. J.
ESN/0209	KASHINA, Boniface David
ESN/0210	KOGI, Ezekiel
ESN/0211	KOROKA, Hassan Nurudeen Zubair
ESN/0212	KUMBE, L. B. N.
ESN/0213	LAWAN, Muhammad Nguru
ESN/0214	LAWAL, A. Idris
ESN/0215	LAWIYE, Abare Mohammed
ESN/0216	MAAS'UD, Mohammed Izom
ESN/0217	MADU, Bukar A.
ESN/0218	MAINA, Yahya T.
ESN/0219	MALGWI, Anna M.
ESN/0220	MBAH, C. E.
ESN/0221	MOHAMMED, Jiya Mohammadu.
ESN/0222	MOHAMMED, Aliyu
ESN/0223	MOLTA, Norman B.
ESN/0224	MWANSAT, Georgina Samuel
ESN/0225	NOCK, Haruna Ishaya
ESN/0226	NONGO, Nyiyongo Nicholas
ESN/0227	NWILENE, F.
ESN/0228	NZEKWU, Anthony Nmora
ESN/0229	OGEDEGBE, A. B. O.
ESN/0230	OGBALU, O. K.
ESN/0231	OGWURIKE, Bose A.
ESN/0232	OKOH, Evelyn Kehinde
ESN/0233	OMOTOSHO, O. Temitope
ESN/0234	OMUDU, Edward Agbo
ESN/0235	OSENI, Aminu Mohammed
ESN/0236	OYENUGA, Babatunde Adefenwa
ESN/0237	OTHMAN, Bukar
ESN/0238	OZOLUA, Kelly Otabo Ojeikhodion
ESN/0239	SHAIDA, Stephen Saikiu
ESN/0240	SHORUNGBE, Adewale Ayodeji
ESN/0241	SOSAN, Mosudi Babatunde
ESN/0242	SOYELU, Olalekan
ESN/0243	SULEIMAN, Abba





ESN/0244	TURAKI, Joy Mbaya
ESN/0245	UMAR, Abba
ESN/0246	UMARU, Abdullahi Baba
ESN/0247	YUSUF, Abdulhammed Umar
ESN/0248	YUSUF, Baba Ali
ESN/0249	YUSUF, S. R.
ESN/0250	TUKUR, Z.
ESN/0251	AKINWANDE, Kayode Lawrence
ESN/0252	OLUJIDE, M. G.
ESN/0253	ALAMENE, A.
ESN/0254	EBENEZER, C. O.
ESN/0255	MINIMAH, P.
ESN/0256	UKOROIJE, Rosemary Boate
ESN/0257	THOMAS, Commander Nwoyeinditon
ESN/0258	SOW, J. G.
ESN/0259	ISONG, I. U.
ESN/0260	FAKUNLE, B. A.
ESN/0261	ADU, B. W.
ESN/0262	OKE, Olubode Akande
ESN/0263	IBRAHIM, K.
ESN/0264	POPOOLA, K. O. K.
ESN/0265	ECHEREOBIA, C. O.
ESN/0266	LAWAL, A. A.
ESN/0267	ADEMOLU, K. O.
ESN/0268	ADELEKE, M.A.
ESN/0269	OGUNFUNMILAYO, A. O.
ESN/0270	IBRAHIM, Nasir Dole
ESN/0271	UMAR, Y. F.
ESN/0272	ABDULLAHI, Yahaya Muhammed
ESN/0273	MAHE, Mohammed Yahaya
ESN/0274	BANDIYA, H. M.
ESN/0275	DANJUMA, B.
ESN/0276	OYEYEMI, B. F.
ESN/0277	AWODIRAN, M. O.
ESN/0278	KEHINDE, T. O.
ESN/0279	FADAMIRO, H.
ESN/0280	ANIKWE, J.C.
ESN/0281	NWOSU, C. J.
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ESN/0283	ADEYEMI, N. A.
ESN/0284	OYERINDE, A.A.





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ESN/0286	OKORE, Oghale Obogheneujewoma
ESN/0287	IHEJIRIKA, G. O.
ESN/0288	OYELADE, O. J.
ESN/0289	OYEWOLE, I. O.
ESN/0290	OJIANWUNA, C. C.
ESN/0291	NWAKAEGHO, M.
ESN/0292	AYANSOLA, A. A.
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ESN/0294	FOLORUNSHO, D. O.
ESN/0295	AYANNUGA, A. J.
ESN/0296	OPOOSUN, Olufemi
ESN/0297	MOKWUNYE, I.
ESN/0298	OLAYIWOLA, M. A.
ESN/0299	OKE, Abiola
ESN/0300	ALAMENE, A.
ESN/0301	AMACHREE, Esther Ibim
ESN/0302	BAWO, D. D. S.
ESN/0303	BENSON-EDE, W.C.
ESN/0304	DIMKPA, Sstanley Obumneke
ESN/0305	AKPODIETE, Nnamaka
ESN/0306	UCHE, Fidelia Belta
ESN/0307	ENWE, N.
ESN/0308	UZAKAH, Richard
ESN/0309	MORRIS, J. G.
ESN/0310	OKENE, Francis Patrick
ESN/0311	ZAKKA, Usman
ESN/0312	NDAM, O. N.
ESN/0313	YULA, H. Z.
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ESN/0315	BANKE, R. O. K.
ESN/0316	ANDA, Daniel Audu
ESN/0317	AHOM, Rosemary I.
ESN/0318	OYELADE, O. O.
ESN/0319	ALABI, J.
ESN/0320	OLANIRAN, Oladele Abiodun
ESN/0321	UGWU, Juliana Amaka
ESN/0322	ONEKUTU, Amana
ESN/0323	AJELARA, Kafayat Oluwakemi
ESN/0324	ALAFIA, Azeezat Oyindamola
ESN/0325	BABALOLA, Oluwaseun O.





ESN/0326	UKPO, William
ESN/0327	OYEDIRAN, Isaac O.
ESN/0328	ANYIM, Alozie
ESN/0329	AGUNBIADE, Tolulope Adebimpe
ESN/0330	OYEDOKUN, Adegoke Victor
ESN/0331	LAWAL, Olusegun Adebayo
ESN/0332	FASUNWON, Bamidele Temitope
ESN/0333	BANJO, Folake M.
ESN/0334	ADEOYE, Temitope
ESN/0335	ADEROLU, I. Adeniran
ESN/0336	OKORIE, Patricia Nkem
ESN/0337	ADEKANMI, Jeremiah O.
ESN/0338	IBITOYE, Olufisayo
ESN/0339	ADETORO, Fouad
ESN/0340	ANOGWIH, Joy
ESN/0341	ADELUSI Mdzuami Stephanie
ESN/0342	ODUOLA, Adedayo
ESN/0343	OJO, James Adebayo
ESN/0344	JODA, Abiodun
ESN/0345	IJADARE, Olaniyi Olamide
ESN/0346	SADIKU, Bukola Toyin
ESN/0347	NWOSU, Luke Chinaru
ESN/0348	UDAH, Onehireba
ESN/0349	AMUSAN, Babatunde O.
ESN/0350	IMOUBE, Tunde Ohiokhioya Thaddeus
ESN/0351	ROTIMI, Johnny
ESN/0352	OLOMUKORO, John Ovie
ESN/0353	EKRAKENE, Taidi
ESN/0354	OMOIGBERALE, Michael Osasele
ESN/0355	IYARE, O. Osadolor
ESN/0356	ANENI, Thomas Idemudia
ESN/0357	OKAKA, Christopher Ehighaukhuo
ESN/0358	EKPERUSI, Ogheneruemu Abraham
ESN/0359	OSHAKUADE, Thompson
ESN/0360	OLOGUN, Pius Foluso
ESN/0361	OYINLOYE, Naomi Adedoyin
ESN/0362	NOUTCHA, Aline Edith
ESN/0363	GBARAKORO, Tambeke Nornu
ESN/0364	NWABUEZE, Ebere
ESN/0365	GEORGENILL, Chiemezie C.
ESN/0366	MOHAMMED, Dalhatu Lawal





ESN/0367	AJAYI, Shindi Hassan
ESN/0368	OGBEDEH, Kenedy Okwudili
ESN/0369	NWOKEJI, Ephraim M.
ESN/0370	UWASOMBA, Chukwudi Festus
ESN/0371	EHISIANYA, Collins N.
ESN/0372	WALI, Abdullahi A.
ESN/0373	JATAU, Abdullahi Jatau
ESN/0374	OKITA, Faith
ESN/0375	ALAYANDE, Musbaudeen Olayinka
ESN/0376	MUSA, Ishaku
ESN/0377	MAGAJI, Turaki Bitrus
ESN/0378	BAWA, Livinus Yakubu
ESN/0379	KWANASHIE, Adobe
ESN/0380	ODEWALE, Gideon Oluwasogo
ESN/0381	OMOTOSHO, Adetutu Esther
ESN/0382	UDAH, Onehireba
ESN/0383	AROGUNDADE, Funlola Justina
ESN/0384	ODEDEYI, Elizabeth Funmilayo
ESN/0385	ABDULLAHI, Nurudeen
ESN/0386	ADEBAYO, Raphael Abiodun
ESN/0387	ADESINA, Jacobs Mobolade
ESN/0388	AFOLABI, Lawrence Adebayo
ESN/0389	OLA-SALAWU, Bukola Bunmi
ESN/0390	ONI, M. O.
ESN/0391	ADEBO Taiwo Cosmas
ESN/0392	OGUNGBITE, Olaniyi Charles
ESN/0393	KAYODE, Olufunke Yemisi
ESN/0394	ADEYEMO, Adenike Christy
ESN/0395	AKINKUROLERE, Rotimi Oluwafemi (Late)
ESN/0396	ILEKE, Kayode David
ESN/0397	ALIYU, G. Mungadi
ESN/0398	PETGRAVE, Meyer Godfrey
ESN/0399	ENYI, Nwanyibuaku
ESN/0400	ADOLPHUS, Okachuku Junior
ESN/0401	ISAH, Musa Dan'azumi
ESN/0402	NNAMEZIE, O. Nwamaka
ESN/0403	NWANKPA, Akachukwu Pius
ESN/0404	TINOK, Andrew
ESN/0405	ONOTU, Christopher Sunny
ESN/0406	GARBA, Rukayya Anchau
ESN/0407	AMAWULU, Ebenezer





ESN/0408	OKOM, Monday Ajigah
ESN/0409	USMAN, Baba Musa
ESN/0410	SAMUEL, Rebecca Naphtali
ESN/0411	EGBON, Ikponmwosa Nathaniel
ESN/0412	HAMMAN, I. Sunday
ESN/0413	MBAH, Ogbonnaya Ibomus
ESN/0414	OGUNDARE, Moses Odunayo
ESN/0415	SAMAILA, Akeweta Emmanuel
ESN/0416	KWAIFA, Nasiru Muhammed
ESN/0417	WAHEDI, Jasini Alexander
ESN/0418	UBAIDU, Mani
ESN/0419	IDACHABA, Peter Napoleon
ESN/0420	ABDULAH, Sule Ojo
ESN/0421	HABIBU, Danjuma
ESN/0422	BENJAMIN, Joy Enechojo
ESN/0423	OGAH, Emmanuel Omogo
ESN/0424	OKOREDJE, K.S
ESN/0425	ONYIRIOHA, Caroline. U
ESN/0426	JONAH, Alice Onyeche
ESN/0427	UKEH, Donald. A
ESN/0428	MADUIKE, Eberechukwu. M
ESN/0429	LAW-OGBOMO, Kolawole Edomwonyi
ESN/0430	ESSIEN, Rosemary Anietie
ESN/0431	SAMBO, Fatima
ESN/0432	NGWAMAH, Jacob Sule
ESN/0433	NAMAN, Kasang
ESN/0434	VADLIA, Janet. P
ESN/0435	YELMI, Baraya Kyala
ESN/0436	DALLA, Chatcham Victor
ESN/0437	TESE, Timothy
ESN/0438	KABEH, Joshua Dauda
ESN/0439	ARINGBANGBA, Rufus Oluwatuyi
ESN/0440	ADETOGO, Temidayo Adekemi
ESN/0441	ADANANU, Sani Adamu
ESN/0442	ATTAH, Okau Achigili
ESN/0443	AROWOLO, Bukola Olajoke E
ESN/0444	OGAH, Emmanuel Ugbede
ESN/0445	OMOREGBEE, Jude
ESN/0446	MUSA, Wada Doka
ESN/0447	AUDU, Abdullahi
ESN/0448	ALO, Emmanuel Babatope





ESN/0449	TAME, V. T.
ESN/0450	ADEYEYE, Musefiu Okunola
ESN/0451	HUSSAINI, Adamu Ladags
ESN/0452	OAYA, Clement Samuel
ESN/0453	DUNUWEL, Danzaria Musa
ESN/0454	MUSA, Usman
ESN/0455	ATIJEGBE, Sylvester Richard
ESN/0456	ADEDUNTAN, Sunday Adeniyi
ESN/0457	ABIODUN, Joseph
ESN/0458	ADAMU, Bashir Kugu
ESN/0459	BELLO, Aishat Imam
ESN/0460	GAIYA, Audu Adamu
ESN/0461	ABDULLAHI, Ramatu Ado
ESN/0462	OGAR, Mabel Ungie-Ada
ESN/0463	SABO, Elidad
ESN/0464	MUSA, Aisha Lami
ESN/0465	USMAN, Fatima
ESN/0466	SHEHU, Maryam Ibrahim
ESN/0467	KADIRI, Onucheojo
ESN/0468	ABDUL, Mohammed Sarki
ESN/0469	DATIJO, Shehu Abduljalal
ESN/0470	MUHAMMAD, Abdulhadi
ESN/0471	USMAN, Maryam Shehu
ESN/0472	SHETTIMA, Fatima A.T
ESN/0473	ABAJUE, Maduamaka Cyriacus
ESN/0474	IHIONU, Godwin Chiwuike
ESN/0475	TSAKMA, Usman Kabiru
ESN/0476	IWOMI, Faith Chinyere
ESN/0477	EWUIM, Ugochukwu Rachael
ESN/0478	MOGBO, Tochukwu Chinedu
ESN/0479	ONYIDO, Angus Ejidikeme
ESN/0480	ONONYE, Benjamin Uzonna
ESN/0481	UGOCHUKWU, Godwin Chidozie
ESN/0482	NWANKWO, Edith Nnonye
ESN/0483	OGBUSU, Vivian Onyinyechukwu
ESN/0484	NGENEGBO, Uche
ESN/0485	OKEKE, John Joseph
ESN/0486	EBUCHE, Chukwudi Michael
ESN/0487	CHIMA, Gladys Nneka
ESN/0488	AKUNNE, Chidi Emmanuel
ESN/0489	DURU, Vincent Chiagozie





ESN/0490	UKONZE, Chikaodili Blessing
ESN/0491	OKAFOR, Kasarachi Patricia
ESN/0492	ONAGBOLA, Ebenezer Oloyede
ESN/0493	EZRA, Abba
ESN/0494	LATEEF, Saheed Adekola
ESN/0495	ABDULBAKI, Mudashir Kijan
ESN/0496	ADEOTI, Omolola Folasade
ESN/0497	KEHINDE Ezekiel Ayobami
ESN/0498	AJIBOYE, Olalekan Gbolahan
ESN/0499	ORE, Hassanat Taiwo
ESN/0500	ADELAJA, Olukayode James
ESN/0501	OLAGUNJU, Oluwaseun Dorcas
ESN/0502	IFALADE, Judith Adejoke
ESN/0503	OJUMoola, Olusegun Adebayo
ESN/0504	AYEGBUSI, Zainab Oluwakemi
ESN/0505	LAIDI, Miudeen Tella
ESN/0506	GAMBO, Abdullahi
ESN/0507	BITRUS, Elizabeth
ESN/0508	DEGRI, Michael Mamman
ESN/0509	NAHUNNARO, Hycenth
ESN/0510	YAKUBU, Appollm Iliya
ESN/0511	SULEIMAN, Mohammed
ESN/0512	AMEH, Igoche George
ESN/0513	IBRAHIM, Abdullahi
ESN/0514	ABUBAKAR, Ibrahim Anka
ESN/0515	AIKI, Istifanus Peni
ESN/0516	DIALOKE, Sunday Ani
ESN/0517	UTONO, Iliyasu Mohammed
ESN/0518	AHMED, Inwa Adamu
ESN/0519	ABDULMALIK, Usman
ESN/0520	NWOYE, Zacharista Ifeamaechi
ESN/0521	LAWAL, Fatima
ESN/0522	JIBRIN, Dahiru Mohammed
ESN/0523	OWOLABI, Yetunde Hannah
ESN/0524	NATALA, Audu Joseph
ESN/0525	OKEKE, Ebere M. A.
ESN/0526	IWUEZE, Miriam Okwudili
ESN/0527	OBIDIGBO, Chinenye Francisca
ESN/0528	EZENWA, Patience Chineyeaka
ESN/0529	UGWUANYI, Ifeoma Kosisochukwu
ESN/0530	OKOYE, Kingsley Chukwuebuka





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ESN/0532	THEOPHILUS, Rosemary Uju
ESN/0533	CHUKWUEZI, Chiamaka Elizabeth
ESN/0534	GAIUS, James Chukwudi
ESN/0535	COBHAM, Akabom Edet
ESN/0536	ASALA, Samuel Abayomi
ESN/0537	ASALA, Shatu Wudiri
ESN/0538	EJIOFOR CHARLES EJIKE
ESN/0539	ANJORIN, Toba Samuel
ESN/0540	SHAWULU, James Clinton
ESN/0541	FREDRICK, Christy C.
ESN/0542	EDACHE, Itodo James
ESN/0543	GHAJI, Abdulrahman
ESN/0544	ONYEKANIHU, Amaka Lilian Chisom
ESN/0545	AJIBADE, Razaq Ola
ESN/0546	ERHUNMWUNSE, Nosakhare Osazee
ESN/0547	IFERE, Nwuneke Okereke
ESN/0548	DIRISU, Abdulrahman
ESN/0549	ODO, Patrick Emeka
ESN/0550	NWEKE, Augustine
ESN/0551	OGBEBOR, Charlee Omorefe
ESN/0552	OKERE, Chidinma Ijeoma
ESN/0553	EZEH, Angela Ebere
ESN/0554	OMOREGIE, Anthony Osarobo
ESN/0555	BDLIYA, James Ayuba
ESN/0556	OKUNROUNMU, Oluwatobiloba Olayemi
ESN/0557	OFORKA, Linda Chinonyelum
ESN/0558	NWABUEZE, Ogechi Flora
ESN/0559	EKHATOR, Osas Emmanuel
ESN/0560	AKPAN, Akaninyene Udoh
ESN/0561	HARUNA, Sylvester Ada
ESN/0562	ETE, John Ayodele
ESN/0563	OBOHO, Diligent Efiong
ESN/0564	SANI Zakariya
ESN/0565	SAMSON, Godwin Ukandu
ESN/0566	JANDE, Elizabeth Hembadon
ESN/0567	HUSSAINI, Suwaiba
ESN/0568	BARDE, Auwal Alhassan
ESN/0569	ONWIIH, Etim Efiong
ESN/0570	ONWIIH, Arit Etim
ESN/0571	ALI, Cecilia Onyawole





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ESN/0573	OBI, Okechukwu Anthony
ESN/0574	AKINSETE, Israel Oluwansola
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ESN/0576	ADENIYI, Kamoru Abdulazeez
ESN/0577	SALIHU, Ibrahim Maikudi
ESN/0578	SADIQ, Ibrahim
ESN/0579	OYIBO-USMAN, Khadijat Ahuoiza
ESN/0580	APEV, Mson John
ESN/0581	SANI, Baba Wudil
ESN/0582	MANYI, Manasseh Msugh-ter
ESN/0583	IBOYI, Ojonugwa Mark
ESN/0584	AZEEZ, Owolabi Moshood
ESN/0585	GBATE, Mohammed
ESN/0586	OLAYEMI, Isreal Kayode
ESN/0587	NNAMONU, Lami
ESN/0588	OCHEME, Faith Odije
ESN/0589	OBADIAH, Happiness Igwe
ESN/0590	SHEHU, Usman
ESN/0591	MUHAMMAD, Kabir Hadiza
ESN/0592	HARUNA, Jibril
ESN/0593	ADEMOSU, Taiwo Oluwadamilare
ESN/0594	LAWAL, Atinuke Favour
ESN/0595	ADEDOJA, Opeyemi Adebayo
ESN/0596	OWOJORI, Olugbenga John
ESN/0597	JEGEDE, Olukayode Oluwole
ESN/0598	ADETUTU, Elizabeth Adekemi
ESN/0599	HASSAN, Amina
ESN/0600	AHMED, Yusuf Abdulahi
ESN/0601	SALEH, Muhammed
ESN/0602	OTOKPA, Icheikan Elias
ESN/0603	SOW, Gudzan John
ESN/0604	ANUGWOM, Uzoma Donatus
ESN/0605	OWOEYE, Olaniyi David
ESN/0606	AHMED, Ado-Baba
ESN/0607	BITRUS, Solomon
ESN/0608	BAKAM, Himma
ESN/0609	YAYOCK, Hosea Chigari
ESN/0610	USMAN, Usman Shehu
ESN/0611	MUSA, Nuradeen
ESN/0612	UDDIN 11, Robert Omotayo





ESN/0613	OSHAGBEMI, Eyitayo Emmanuel
ESN/0614	ARONG Gabriel
ESN/0615	OKWECHE, Simon Idoko
ESN/0616	IMEH Iyeme Ebong
ESN/0617	IME Okon Udo
ESN/0618	ABO Iso Nta
ESN/0619	MUHAMMAD, Sadiq Ramalan
ESN/0620	MALANN, Yiola David
ESN/0621	SOLOMON, John
ESN/0622	OKEKE, Chinedu
ESN/0623	OLUWAFEMI, Rufus Adebisi
ESN/0624	EKEH, Felicia Nkechi
ESN/0625	MEDUGU, Marcel Alexander
ESN/0626	MOHAMMED, Shehu
ESN/0627	AJIBADE, Olumuyiwa Emmanuel
ESN/0628	ONIGBANJO, Akeem
ESN/0629	POPOOLA, Grace
ESN/0630	JOSEPH, Samson Gyutorwa
ESN/0631	DOGO, Jacob Makama
ESN/0632	ABDULRASHID, Firdausi Ashiru
ESN/0633	ADAMU, Hadiza Wasagu
ESN/0634	OYENIYI, Emmanuel Ayobami
ESN/0635	ADESINA, Femi Peter
ESN/0636	OLATOKUNBO, Jeremiah Ayinde
ESN/0637	LARAYETAN, Ayo Adebowale
ESN/0638	BABALOLA, Abiodun Ibukun
ESN/0639	OLISE, Christian Chukwu
ESN/0640	AUDI, Auwalu Hassan
ESN/0641	SULE, Hassan
ESN/0642	SANDA, Nafiu Bala
ESN/0643	MOHAMMED, Bintu
ESN/0644	ALEX-ABEDO, Josephine Ohunene
ESN/0645	UGWUEZE, Hyginus Tobeckukwu
ESN/0646	ONAH, Ikechukwu Eugene
ESN/0647	OKWOR, Jude Ifeanyi
ESN/0648	JACOB, Philimon
ESN/0649	MINTA, Musa Dahiru
ESN/0650	ODEJAYI, Adedayo Olugbenga
ESN/0651	SALAWU, Adedayo Richard
ESN/0652	AINA, Sulaimon Adebisi
ESN/0653	KALEJAIYE, Samuel Adesanya





ESN/0654	EWEDAIRO, Bilikis Iyabode
ESN/0655	ADEOTI, Adewale Opeyemi
ESN/0656	KUDEMPEO, Christopher Temidayo
ESN/0657	OKUNOLA, Oladimeji Seyi
ESN/0658	EKE, Samuel Sunday
ESN/0659	YUSUF, Garba
ESN/0660	UKUBUIWE, Azubuike Christian
ESN/0661	USMAN, Mohammed Doko
ESN/0662	OBI, Pauline Uchenna
ESN/0663	ADAMU, Muhammed
ESN/0664	OLUMOH, Nurat Ayo
ESN/0665	YAHAYA, Mohammed Nda
ESN/0666	CECE, Mayaki Alhaji
ESN/0667	UWAGBAE, Michael Aigbe
ESN/0668	ONUOHA, Blessing
ESN/0669	AJU-AMEH, Celina Onyawoibi
ESN/0670	AMAECHI, Austin Amaechi
ESN/0671	ONUH, Martin Onuh
ESN/0672	EZIKE, N. Monica
ESN/0673	UBA, Chinyere Peace
ESN/0674	NWACHUKWU, Michael O.
ESN/0675	SARUMI, Bolanle Basirat
ESN/0676	EMERIBE Ebenezer Okechukwu
ESN/0677	EKE, Bethel A.
ESN/0678	UGAGU, Gerald Mmaduabuchi
ESN/0679	IKPEAMA, Chidinma Adanna
ESN/0680	OZIOMA, Asagwara Jesica
ESN/0681	NEGBENEBOR, Helen Ehimemen
ESN/0682	ADELAKUN, Saheed Babatunde
ESN/0683	LAWAL, Abdrahman Adebawale
ESN/0684	AHMED, Ugbede Christiana
ESN/0685	MATUR, Bernard Malau
ESN/0686	IYAMU, Joyce Igunna
ESN/0687	OLAGBAJU, Akintoye Rufus
ESN/0688	DOGONYARO, Banenat Bajehson
ESN/0689	KAMANI, Joshua
ESN/0690	NNABUIFE, Henry Ekene
ESN/0691	OBALOTO, Olarinde Babatunde
ESN/0692	TANKO, James Tenshak
ESN/0693	OGAUGWU, Christian Ejikeme
ESN/0694	OLALEKE, Sunday Ademola





ESN/0695	IBRAHIM, Wahab Ayinde
ESN/0696	SULEIMAN, Amina Sani
ESN/0697	MUSA, Ismail
ESN/0698	AJAO, Adeyemi Mufutau
ESN/0699	OBEMBE, Abiodun
ESN/0700	YUSUF, Sa'adat Yetunde
ESN/0701	LIADI, Muideen Tella
ESN/0702	AGHAYEDO, Cosmo Oghogho
ESN/0703	OPOGGEN, Love
ESN/0704	OMARA-ACHONG, Theresa
ESN/0705	ABUBAKAR, Attahir
ESN/0706	EKEDO, Chukwuebuka Mathias
ESN/0707	ODEYEMI, Moses Olusesan
ESN/0708	YORIYO, Kennedy Poloma
ESN/0709	SENI, James Barka
ESN/0710	MUSA, Dahiru
ESN/0711	BUKAR, Nuhu
ESN/0712	DOMO, Gama Albert
ESN/0713	ALIYU, Usman Habiba
ESN/0714	ABDULLAHI, Muhammad Abdullahi
ESN/0715	AGESA, Godwin
ESN/0716	AYUBA, Jemimah
ESN/0717	ASHER, Rejoice
ESN/0718	SHUAIBU, Bala Abdulmalik
ESN/0719	LAMOGO, Yohanna
ESN/0720	ISMAIL, Muhammad
ESN/0721	ALLISON, Love Nma
ESN/0722	NWOKE, Bethram Ekejuiba Bright
ESN/0723	NWANADE, Chuks Fidelis
ESN/0724	GARBA, Musa
ESN/0725	IYEH, Concilia
ESN/0726	AFOLABI Omolola Oluwafumilayo
ESN/0727	AWOJODUN, Abolanle N.
ESN/0728	ADELEYE, Adeoluwa Oluwaseyi
ESN/0729	NNAJI, Usman Gimba
ESN/0730	GYWA, Gideon Deme
ESN/0731	MOHAMMED, Ibrahim Gabar
ESN/0732	MWANKWO, Bridget Chichi
ESN/0733	OLANREWAJU, Comfort Adetutu
ESN/0734	NZEWUIHE, Gospel Uchechukwu
ESN/0735	AHMED, Hussein Oshomah





ESN/0736	TIM-IWUAGWU, Ezinwa Natalie
ESN/0737	EZEAMAKA, Sally Chifum
ESN/0738	ONABE, Maria B.
ESN/0739	EJEMBI Abah Matthew
ESN/0740	ILLOH, Chukwujindu
ESN/0741	OKOREAFFIA, Nnennaya Queeneth
ESN/0742	JOSHUA, Izuma
ESN/0743	MANUEL, Enajerho
ESN/0744	ROWLAND-GAMBA, Ngozi Rose
ESN/0745	UDONSEK, Aniebiet Somto
ESN/0746	OZONMA, Obiugeli Ukamaka
ESN/0747	ANABA, Chidinma Emmanuella
ESN/0748	NASSAI, Ishaku
ESN/0749	TOROMA, Lawrence
ESN/0750	OLUWAMAKINDE, Biodun Adekunle
ESN/0751	ONAYEMI, Stephen Olusola
ESN/0752	PETER, Emmanuel
ESN/0753	OKRIKATA, Emmanuel
ESN/0754	IYONGO, Titus Terungwa
ESN/0755	EKOJA, Edache Ernest
ESN/0756	SIMON, Dada Lilian
ESN/0757	MONDAY-BUBOU, Biekuromo Simon
ESN/0758	UWALAKA, Onyekachi Anozie
ESN/0759	ATERE, Bukola Mary
ESN/0760	YOLA , Aminu Isma'l
ESN/0761	MANGUTS, Yabans Sundunts
ESN/0762	SULEIMAN, Habiba
ESN/0763	AFOLAYAN, Catherine Bola
ESN/0764	BUM, Ver-Tor Francis
ESN/0765	AKU, Ayuba Ambi
ESN/0766	DZASU, Johnson Waziri
ESN/0767	CHAFE, Aliyu Danlami
ESN/0768	IWENDI, Grace Odunayo
ESN/0769	KOJAH, Babatunde Francis
ESN/0770	FAROUK, Aisha
ESN/0771	IBRAHIM, Aliyu Alaku
ESN/0772	MUNDI, Adamu Danjuma
ESN/0773	ABDURRAHMAN, Abdulhafeez
ESN/0774	NJILA, Hasley Livinus
ESN/0775	IBEKWE, Hyginus
ESN/0776	WINTOLA, Umar Haulatu





ESN/0777	MADARA, Alhaji Adamu
ESN/0778	OTEGWA, Alexander-Paul Ofana
ESN/0779	ADEWALURE, Segun Olawale
ESN/0780	AMEH, Ugbede Christiana
ESN/0781	USMAN, Naji Gimba
ESN/0782	LAWAL, Alvada Victor
ESN/0783	LOLADE, Akintayo David
ESN/0784	AZARE, Bala Adamu
ESN/0785	AHMAD-ALIZAGA, Salihu Lewon
ESN/0786	OSAHOR, Kate Esther
ESN/0787	IDOWU, Rachel Toyosi
ESN/0788	OKHAIFOH, Joy Oluchi
ESN/0789	IDONIBOYE, Tamunoingonegim Bekeangama
ESN/0790	DANTAKO, Fatima
ESN/0791	OLADUNMADE, Moses Arinla
ESN/0792	NWANNUNU, Ifeoma Ude
ESN/0793	AMADI, Gloria Ijeoma
ESN/0794	IDORENYIN, Bassey Ekerette
ESN/0795	GBENENEH, Aniabari Asumene
ESN/0796	ODETOYE, Adefunke Adedayo
ESN/0797	UBULOM, Peace Mayen Edwin
ESN/0798	ADO, Saminu
ESN/0799	GIWA, Adulazeez Olabode
ESN/0800	BAJULAIYE, Albert Ajayi
ESN/0801	AIYEBOGUN, Tomisin Thelma
ESN/0802	OJO, Olusegun Ayinde
ESN/0803	ADETUNJI, Bamidele Shadiat
ESN/0804	ABUBAKAR, Zainab Bello
ESN/0805	BUKAR, Ba'ale
ESN/0806	DAUDA, Zakaria
ESN/0807	GAMBO, Farouk Mbororo
ESN/0808	ABDULLAHI, Halima Maina
ESN/0809	MAINA, Usman Muhammad
ESN/0810	UMELO, Chidinma Queen
ESN/0811	SANI, Ibrahim
ESN/0812	ABDULLAHI, Sani Fana
ESN/0813	ALKALI, Zaharaddeen Dahiru
ESN/0814	USMAN, Salisu Batagarawa
ESN/0815	SHUAIBU, Tasiu
ESN/0816	MUHAMMAD, Hafizu Sulaiman
ESN/0817	AHMAD, Ibrahim Ibrahim





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ESN/0819	MICHAEL, Olayinka Daniel
ESN/0820	AMUGA, Aduk Gideon
ESN/0821	OMBUGADU, Ruth Jamila
ESN/0822	TONGJURA, Joseph Deshi Chingtok
ESN/0823	HASSAN, Suleiman Chuntar
ESN/0824	UMBUGALA, Timothy Alaku
ESN/0825	ADEBAYO, Ugochi
ESN/0826	YAKO, Andrew Bmibmitawuza
ESN/0827	ADAMU, Chidinma Yola
ESN/0828	ADAMU, Ezekiel
ESN/0829	SUNDAY, Patience Lama
ESN/0830	ABDULLAHI, Mairiga Mohammed
ESN/0831	DARDA, Florence Olufunke
ESN/0832	AKAA, Nguseer Grace
ESN/0833	MATHEW, Samaila
ESN/0834	ABDULLAHI, Auwal Aliyu
ESN/0835	SULEIMAN, Safiya
ESN/0836	ISHAYA, Kato Auta
ESN/0837	AHMAD, Danjuma Sufi
ESN/0838	NASIR, Shu'aib Halliru
ESN/0839	BARAU, Bashir
ESN/0840	ADELEYE, Olaide Stella
ESN/0841	AKANNI, Oluwadamilola Iyinoluwa
ESN/0842	ADO, Saminu
ESN/0843	BALARABE, Suleiman
ESN/0844	MUSA, Mabu Jibrin
ESN/0845	HABIBU, Mainasara
ESN/0846	ABDULLAHI, Salihu Abubakar
ESN/0847	DADA, Odunayo Oluwakemi
ESN/0848	GARBA, Jabiru
ESN/0849	HABU, Isadu Tela
ESN/0850	ABDULLAHI, Salau Rakiya
ESN/0851	MUHAMMAD, Hafsat
ESN/0852	TANKO, Hajara Zarmai
ESN/0853	DAUDU, Mercy Irene
ESN/0854	ABDULLAHI, Rukayat Olayinka
ESN/0855	OLAYIOYE, Adesanya
ESN/0856	ALAO, Fatai Olaitan
ESN/0857	ODEWOLE, Adeola Foluke
ESN/0858	GBADEGESIN, Odunayo Joshua





ESN/0859	ADELEKE, Olugbenga Joshua
ESN/0860	AJIBOYE, Ebenezer Oyerinde
ESN/0861	OYEWOLE, Latifat Abiola
ESN/0862	SOOM, Solomon Terseer
ESN/0863	YARKWAN, Isaiah Ishangev
ESN/0864	OBISIKE, Victor Ugochukwu
ESN/0865	IGBER, Godwin Terzungwe
ESN/0866	AJAYI, Andrew Ayodeji
ESN/0867	ADEDIJI, David Adeolu
ESN/0868	AJEWUYI, Cecilia Ajewemimo
ESN/0869	IDOLOR, Aghogho Joy
ESN/0870	OMBUGADU, Akwashiki
ESN/ 0871	ABUBAKAR, Sama'ila
ESN/0872	BINSHAK, Bala Nenrotmwa
ESN/0873	ABANISE, Mary Titilayo
ESN/0874	JONAH, Udeme Etim
ESN/0875	AHMED, Abdulhamid
ESN/0876	ORAKWELU, Chinemerem Hodges
ESN/0877	ASADU, Pamela Chinecherem
ESN/0878	AGUZIE, Ifeanyi Oscar Ndimkaoha
ESN/0879	GOMDUN, Yenvuah Warwar
ESN/0880	DANUAN, Besse Mathilda
ESN/0881	ALADE, Ifeoluwa Adenike
ESN/0882	AHMAD, Adamu Sakina
ESN/0883	ADELEYE, Esther Aderonke
ESN/0884	OKEKWU, Benjami
ESN/0885	ADAMU, Isaac
ESN/0886	SAMUEL, Oyiza Mariah
ESN/0887	MUHAMMAD Sulaiman Tasiu
ESN/0888	JIBRIN, Imam Aisha
ESN/0889	ZUBAIRU, Talatu Salamatu
ESN/0890	YOHANNA, Hannatu
ESN/0891	NMA, Etsu-Musa
ESN/0892	ABDULLAHI, Mohammed Alhaji
ESN/0893	TASIE, Purity Chizoba
ESN/0894	LIMAN, Ndako Uthman
ESN/0895	NURUDEEN, Baliquees Omowunmi
ESN/0896	ABDULRAHAMAN, Mayowa Amir
ESN/0897	MOHAMMED Gaba Ibrahim
ESN/0898	BUKAR, Ahmadu
ESN/0899	ABUBAKAR, Ali Abubakar





ESN/0900	DAWUD, Amina Muhammad
ESN/0901	MUSA, Malah Alhaji
ESN/0902	KUMSHE, Isa Bukar
ESN/0903	EMMANUEL, Chiroma Lucy
ESN/0904	ZUBAIRU, Umar Khadija
ESN/0905	DANJUMA, Solomon
ESN/0906	ANUMBA, Joseph Uche
ESN/0907	NWANGWU, Udoka Chukwubuofu
ESN/0908	EZIHE, Ebuka
ESN/0909	DOGUNRO, Festus
ESN/0910	AGHAI, Nneka Obiageli
ESN/0911	NGENE, Chinedu Innocent
ESN/0912	ORJI, Christain Tochulwu
ESN/0913	OHANU, Chinenye Maria-Gorretti
ESN/0914	EZEWANNE, Bonaventure Chidi
ESN/0915	OGUNKOMOYA, Fumilayo Bukola
ESN/0916	WATENTENA, Amos
ESN/0917	FASUSI, Samuel Aanuoluwapo
ESN/0918	ITINA, Veronica Inibehe
ESN/0919	SHEHU, Ali
ESN/0920	ANDRAWUS, Agwanda Gradder
ESN/0921	YAJI, Asoo Dorcas
ESN/0922	MARKUS, Blessing Visa
ESN/0923	JAAFAR, Zainab Abubakar
ESN/0924	SANTURAKI, Ahmed Aliyu
ESN/0925	NADILIYA, Lilian Michael
ESN/0926	ADEJOH, Victor Ameh
ESN/0927	SOLOMON, Dauda
ESN/0928	JARED, Satburi Gangso
ESN/0929	MAIGIDA, Rikin Luka
ESN/0930	GAYA, Sharifah Saidu
ESN/0931	ABUBAKAR, Maryam
ESN/0932	WULGO, Mariama Abba
ESN/0933	APAGU, Nom Bashir
ESN/0934	MUSTAPHA, Isa
ESN/0935	MUSTAPHA, Umar Ali
ESN/0936	SHERIFF, Zainab Ali
ESN/0937	BABABE, Ibrahim Babagana
ESN/0938	IBRAHIM, Idris Alhaji
ESN/0939	MOHAMMED, Adamu Gambo
ESN/0940	AJI, Shettima Muhammad





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ESN/0942	MUSA, Abubakar
ESN/0943	BUKAR, Madu
ESN/0944	MUSA, Sastawa Gwoza
ESN/0945	ALIYU, Alhassan Abdullahi
ESN/0946	ZANNA, Baba Gana
ESN/0947	MODU, Mai Kyari
ESN/0948	GREMA, Kaumi
ESN/0949	ABBA, Baba Gana
ESN/0950	MUHAMMAD, Auta Aminu
ESN/0951	EMMANUEL, Lucy
ESN/0952	USMAN, Imam Ibrahim
ESN/0953	ABUBAKAR, Alhaji Shehu
ESN/0954	AHMAD, Rufa'i Fatihu
ESN/0955	DANIEL, Wayo Danjuma
ESN/0956	GARBA, Columbus Liatu
ESN/0957	AYUBA, Scholastica Onyaweyo
ESN/0958	HABILA, Bitrus
ESN/0959	KOLAWOLE, Asiata Adekilekun
ESN/0960	JUNAID, Quazim Olawole
ESN/0961	ALI, Halima Muhammad
ESN/0962	MUSA, Hafsat
ESN/0963	BALA, Sarah Iwuongo
ESN/0964	KURE, Catherine
ESN/0965	UMAR, Sanusi Galadima
ESN/0966	NUSAIBA Bala Sarki-Gobir
ESN/0967	KASSIM, Maryam Abdulkadir
ESN/0968	ADULUGBA, Ode Abel
ESN/0969	ATSUWE, Terese Simon
ESN/0970	ALAMU, Olaniyi Thomas
ESN/0971	FATUNMIBI, Oluwabusola Temitope
ESN/0972	GEORGE-ONAH, Jenifer Amara
ESN/0973	CHIKEZIE, Friday Maduka
ESN/0974	MODU, Kurama Alhaji
ESN/0975	ASIWAJU-BELLO, Shekinat Kehinde
ESN/0976	AKINBULUMA, Mobolade Dele
ESN/0977	GBOLAHAN, Felicia Abosede
ESN/0978	FASHINA, Timothy Olusegun
ESN/0979	OLADIGBOLU, Adeyinka Abiola
ESN/0980	BUBA, Musa
ESN/0981	ADEOGUN, Adedapo Olufemi





ESN/0982	AKINKUNMI, Olukemi Yetunde
ESN/0983	AMOBI, Maduabuchi Inwele
ESN/0984	OLADEJO, Afolabi Ola
ESN/0985	ADEWUMI, Adebola Olajumoke
ESN/0986	PHILIP-ATTAH, Mary Tejumade
ESN/0987	AGBOOLA, Ifeoluwa Seun
ESN/0988	TIMOTHY, Modupe Ifejola Joan
ESN/0989	AYANDOKUN, Ayangbade Emmanuel
ESN/0990	MUSTAPHA, Suleiman
ESN/0991	OKEKE, Sidney Alozie
ESN/0992	NANVYAT, Nannim
ESN/0993	BABARINDE, Modupe Yemisi
ESN/0994	ALUMA, Lydia Ashedzi
ESN/0995	ODEYEMI, Oluwakemi Oluwaseyi
ESN/0996	JOSEPH, Nagyal Mamani
ESN/0997	SIMSE, Rotgak Luka
ESN/0998	MOHAMMED, Usman
ESN/0999	JOACHIM, Blessing Ngozichukwu
ESN/1000	ABBA, Ogwuche Joseph
ESN/1001	ANIANU, Gloria Oroma
ESN/1002	BEKE, Ebipade Jessica
ESN/1003	NZIE, Onyeka Peter
ESN/1004	ADELEYE, Adetayo David
ESN/1005	AJIBOYE, Oludele
ESN/1006	GIWA, Muhydeen Mobolaji
ESN/1007	UGBE, Lawrence Ahmed
ESN/1008	LAWAL, Mujidat Temidayo
ESN/1009	PAM, Dung Davou
ESN/1010	DA'AN Samson Andrew
ESN/1011	MAFUYAI, Mahanan Julius
ESN/1012	AGBEDE, Tomiwa Ounwansuan
ESN/1013	IFEACHO, Chidinma Miracle
ESN/1014	OSARETIN, Abundance Itohan
ESN/1015	EGBON, Osatae
ESN/1016	NJOKU, Chukwuemeka Ikechukwu
ESN/1017	ALEJO, Ayokunle Oluwaseun
ESN/1018	IDOKO, Joy Ejemen
ESN/1019	IDRIS, Hamza Yahaya
ESN/1020	NDAMS, Iliya Shehu
ESN/1021	IHEME, Martina Nnenna
ESN/1022	UKATU, Patrick Odey





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ESN/1025	YERIMA, Halima Abubakar
ESN/1026	SUNDAY, Oghenetega
ESN/1027	OGBONA, Confidence Uchenna
ESN/1028	JINATU, Lami Wamdeo
ESN/1029	EZEMUOKA, Lilian Chiamaka
ESN/1030	EZE, Gideon Chinedu
ESN/1031	OJUKWU, Kenekchukwu Chukwuemeka
ESN/1032	ILESANMI, Olawale Temitope
ESN/1033	NWOBODO, Maureen Amuchechukwu
ESN/1034	BOBADOYE, Bridget
ESN/1035	KAMBA, Bayo
ESN/1036	AGADA, Jeremiah
ESN/1037	AFOLABI, Oluwamayowa Oluwadamilola
ESN/1038	OMOTOSO, Folorunso Dotun
ESN/1039	OBAGHA, Adachukwu Scholastica
ESN/1040	ALAGBE, Eunice Abidemi
ESN/1041	TURSHAK, Longtong Garba
ESN/1042	ALIYU, Abubakar Sadiq
ESN/1043	ADEGORITE, Oyeboade Solomon
ESN/1044	EZE, Miriam Ukamaka
ESN/1045	OKPARAVERO, Newman Festus
ESN/1046	ISHAYA, Musa
ESN/1047	RAJAB, Garba
ESN/1048	IKPI, Patrick Oka
ESN/1049	EMMANUEL, Rachael Ajegana Lami
ESN/1050	BALA, Ruth Buba
ESN/1051	ISHAYA, Emmanuel Naandok
ESN/1052	EZENWAFOR, Chiazom Onyedikachi
ESN/1053	ANUMOKA, Christian Faith
ESN/1054	TSEHEMBA, Vincent Nyitor
ESN/1055	CHUKWU, Lwanga Azubike
ESN/1056	ODUTOLA, Bamidele Samuel
ESN/1057	ALIYU, Danjuma Aliyu
ESN/1058	HAMZA, Usman Ibrahim
ESN/1059	USMAN, Alhassan Gabi
ESN/1060	YISA, Solomon
ESN/1061	OKEKE, Peter Chukwunwendu
ESN/1062	DEDE, Peter Matakai
ESN/1063	ABUBAKAR, Yusuf Danjuma





ESN/1064	YAHAYA, Aliyu Gusau
ESN/1065	AGWU, Ekenma Julia
ESN/1066	KADUNA, Hwanvyon
ESN/1067	ABELEGA, Iyuana
ESN/1068	ADEYEMI, Wuraola Adenike
ESN/1069	RABIU, Bashar
ESN/1070	BAKO, Longji Aaron
ESN/1071	ADAMU, Hassan
ESN/1072	EGBE, Omite Christiana
ESN/1073	IBRAHIM, Shehu
ESN/1074	TAMBA, Zainab
ESN/1075	ODEJE, Victor Edoh
ESN/1076	OKIEMUTE, Tobih Francis
ESN/1077	DASO, Femi Tosin
ESN/1078	AYANGBEMI, Tumininu Busola
ESN/1079	CHIBUOGWU, Francisca Ugochukwu
ESN/1080	ARIBODOR, Dennis.N.
ESN/1081	IRIKANNU, Kindness Chidi
ESN/1082	ANIEFUNA, Chikodili Obiajulu
ESN/1083	NWELE, David Ekene
ESN/1084	UHUO, Cosmas Augustus
ESN/1085	ONWE, Chikodili Simeon
ESN/1086	UGURU, Ogbonna Sebastian Elom
ESN/1087	OKE, Boniface Joseph
ESN/1088	EKEMEZIE, Victor Chinaza
ESN/1089	IKEH, Roseline Ekene
ESN/1090	IFEANYI, Emmanuel Obiefule
ESN/1091	CHIBUMMA, Immaculata Nzeukwu
ESN/1092	ONWUACHUSI, Ginika Lovelyn
ESN/1093	UCHENNA, Athanasius Ubaka
ESN/1094	CHIKWENDU, Joy Ifeyinwa
ESN/1095	IKECHUKWU, Linda Chioma
ESN/1096	NGWU, Mariagoretti Ifeoma
ESN/1097	DOGUNRO, Festus A.
ESN/1098	EZUGWU, Linda Obianuju
ESN/1099	ONWUDE, Cosmas Ogbonnaya
ESN/1100	NWOSU, Ebuka Michael
ESN/1101	NWANNEKA, Victoria Elosiuba
ESN/1102	OGBUEFI, Emmanuel Okwudili
ESN/1103	ENYINNAYA, Joseph Obinna
ESN/1104	AKHIGBE, Charity Irekpita





ESN/1105	NWEBOR, Emmanuel
ESN/1106	NWIGWE, Juliet Onyinye
ESN/1107	KOLAPO, Kehinde Temitope
ESN/1108	ANUGWOM, Uzoma Donatus
ESN/1109	ADEWOYE, B. Bolajoko
ESN/1110	MARTINS, Chizoba Cynthia
ESN/1111	SULAIMAN, Sadi Ibrahim
ESN/1112	CHUKWUEKEZIE, Okechukwu Chimaeze
ESN/1113	AWODOYIN, Tosin Ifedolapo
ESN/1114	OMOGOROYE, Opeyemi Oluwasanmi
ESN/1115	HASHIMU, Sawe
ESN/1116	WILMOT, Williams S.
ESN/1117	DANIEL, Alice John
ESN/1118	HAMSA, Alhaji Abdullahi
ESN/1119	OMOGUNLOYE-ADEOYE, Olufunke Anuoluwa
ESN/1120	SHAFIU, Alhaji Shehu
ESN/1121	UMAR, Aliu
ESN/1122	ABDULSALAM, Fatimah Oluwakemi
ESN/1123	CHIKODILI, Prince A.
ESN/1124	MARTINS, Augustine
ESN/1125	NWOKPOKU, Emeka Dominic
ESN/1126	TAIWO, David Ishola
ESN/1127	KASHETU, Rukayyat Queen
ESN/1128	HARUNA, Patience Bah
ESN/1129	NKEM, Ikeorah
ESN/1130	DIRISU, Alliagbor
ESN/1131	UDOFIA, Lydia Etuk
ESN/1132	IKPA, Grace Iveren
ESN/1133	IBRAHIM, Sani
ESN/1134	BARWA, Abubakar
ESN/1135	EKWUONU, Eucharika Ngozi
ESN/1136	OKOYE, Chibueze Michael
ESN/1137	JIMOH, Bunmi Omowumi
ESN/1138	OBETA, Sylvester Sunday
ESN/1139	HARUNA, Danjuma Enemaku
ESN/1140	ASOBO, Terungwa Philip
ESN/1141	ODEY, Simon Adoji
ESN/1142	KASHERE, Muhammed Abdullahi
ESN/1143	ZAHARADDEEN, Shuaibu
ESN/1144	ABA, Emmanuel Ada
ESN/1145	AGBOOLA, Balikis Iyalode





ESN/1146	ZAKARI, Hajara
ESN/1147	JAMES, Ishiaku Maikenti
ESN/1148	KAYODE, Ayodeji Emmanuel
ESN/1149	TERSUR, Jennifer
ESN/1150	ABUBAKAR, Ramlatu
ESN/1151	JUBRIL, Maryam Suleiman
ESN/1152	ZAKARI Habiba Haruna
ESN/1153	ABBATI, Nasiru
ESN/1154	ENVULU, Grace Ayikpo
ESN/1155	OLADEJO, Afolabi Ola
ESN/1156	MAHMUD, Zainab Dan'anacha
ESN/1157	GULLOMA, Nafiu Mahmud
ESN/1158	AUWAL Muhammed Musa
ESN/1159	SALLAU, Freedom Nimkur
ESN/1160	DAZANG, Sendi Umar
ESN/1161	MAMMAN, Shadrach
ESN/1162	SAEEED, Usman Abdullahi
ESN/1163	HENRY, Ekene
ESN/1164	LEVI, Reuben Yunana
ESN/1165	YUGUDA, Amina Umar
ESN/1166	BUKAR, Usman
ESN/1167	ABDULLAHI, Kabir Bindawa
ESN/1168	FALMATA, Haruna Bwala
ESN/1169	BAKO, David Amo
ESN/1170	KAYODE, Ayodeji Emmanuel
ESN/1171	KARAYE, Ibrahim Sadiya
ESN/1172	ELUYEBA, Olumayowa Joseph
ESN/1173	MUHAMMED, Aminu Auta
ESN/1174	AKINTOYE, Akinbiyi Charlse
ESN/1175	MUHAMMED, Hassan Ibrahim





Announcement

WORLD BEE DAY



20 MAY

"All roads lead to UniJos, October 2025"

"Mark your calendars: "All paths converge at UniJos, October 2025"

**ENTOMOLOGICAL SOCIETY OF NIGERIA (ESN)
TO HOLD
54TH ANNUAL ESN CONFERENCE
AT UNIVERSITY OF JOS IN OCTOBER 2025**

BE PREPARED BE IN ATTENDANCE AND TAKE PART

