

**BIBLIOGRAPHIC ANALYSIS OF ARTICLES PUBLISHED IN THE  
NIGERIAN JOURNAL OF PALMS AND OIL SEEDS (NJPOS),  
1953 – 2003**

BY

**Luke Obasuyi**

Nigerian Institute for Oil Palm Research (NIFOR),

**ABSTRACT**

This paper reviewed the articles published in NJPOS in the last fifty years 1953-2003. Two hundred and fifty-six (256) articles were published by 153 authors. Majority of the articles were single authored while multiple authorship are being gradually embraced. The number of articles increased as the scope of the journal expanded. Over forty (40.2%) percent of the articles were on Agronomy/Soil Management. Crop Protection followed with (22.6%), while design, fabrication, and product utilization had the lowest scores.

Although the journal is irregular in publication, yet it is a key journal in the palm science research in Nigeria and should be utilized by authors to publish their research findings.

**KEYWORDS:** Bibliography, Palms Research, Bibliographic analysis, Scientists' productivity.

**INTRODUCTION:**

The Nigerian Institute for Oil Palm Research (NIFOR) was established in 1939 by the British Colonial Administration as the Oil Palm Research Station (OPRS) to help Nigeria meet the increasing competition from palm oil producing countries in the Far East Indonesia and Sumatra. The purpose of setting up the institute was to undertake research into and investigation of problems and matters relating to the oil palm and its products, and for the provision of information and advice relating to oil palm. The Oil Palm Research Station (OPRS) was taken over by the West African Research Organization (WARO), by ordinance No.20 of 1951. Its scope of activities then extended to the then Gold Coast (now Ghana) and Sierra Leone. Upon independence of the member countries in the late 1950's and early 1960's, and the consequent dissolution of OPRS, the Nigerian component was renamed the Nigerian Institute for Oil Palm Research (NIFOR) by the Research Institute's Act No. 33 of 1964. The Institute's mandate was expanded to include coconut, date palm, raphia and other palms of economic importance with specific emphasis on:

- Breeding
- Agronomy
- Pest/Disease Control
- Processing/preservation/storage
- Design/Fabrication
- Farming system
- Product utilization
- Extension

The research programmes of the institute is organized into seven main areas of activities: Crop improvement, Biotechnology, Resource and Crop Management, Crop Protection, Technology and product development, economic study and extension services/ farmers input linkage system (REFILS). According to Omoti (1999) NIFOR has since inception played a leading role in oil palm and palms research in the world, and has earned for itself an international reputation as a centre of excellence.

Consequent upon the research activities carried out in the institute, a journal was established in 1953 titled "Journal of the West African Institute for Oil Palm Research (WAIFOR)". The primary function of this journal was to provide a means of recording the research work carried out at the Institute and in so doing to extend the scientific knowledge of the oil palm. It was a journal devoted entirely to the oil palm. Over the years, this journal metamorphosed into the Nigerian Journal of Palms and Oil Seeds (NJPOS).

As the name of the Institute changed from WAIFOR to NIFOR after Nigeria's Independence, the journal's title changed from "Journal of WAIFOR" to Journal of NJPOS". When the institute became purely national in 1964, the mandate expanded to include other palms with issue No. 15 of 1965 to maintain the numerical sequence of publication.

In view of Nigeria's demand for vegetable oil and oil seeds, the scope of the journal was expanded to include vegetable oil and oil seed, the title changed to NIPOS and it follows the provision series as volume VIII 1987. In all, 33 issues have been published since inception from 1953–2003 as shown in Table 1.

**Table 1: Issues of NJPOS Journals Published from 1953 2003**

S/N	Journal Title	Vol.	No.	Year
1	Journal of WAIFOR	1	1	1953
2	Journal of WAIFOR	1	2	1954
3	Journal of WAIFOR	1	3	1955
4	Journal of WAIFOR	1	4	1956
5	Journal of WAIFOR	2	5	1956

**Table 1: Continues**

S/N	Journal Title	Vol.	No.	Year
6	Journal of WAIFOR	2	6	1957
7	Journal of WAIFOR	2	7	1957
8	Journal of WAIFOR	2	8	1959
9	Journal of WAIFOR	3	9	1959
10	Journal of WAIFOR	3	10	1960
11	Journal of WAIFOR	3	11	1961
12	Journal of WAIFOR	3	12	1962
13	Journal of WAIFOR	4	13	1963
14	Journal of WAIFOR	4	14	1963
15	Journal of NIFOR	4	15	1965
16	Journal of NIFOR	4	16	1968
17	Journal of NIFOR	5	17	1968
18	Journal of NIFOR	5	18	1968
19	Journal of NIFOR	5	19	1973
20	Journal of NIFOR	5	20	1974
21	Journal of NIFOR	6	21	1978
22	Journal of NIFOR	6	22	1981
23	Journal of NIFOR	6	23	1982
24	Journal of NIFOR	6	24	1983
25	Journal of NIFOR	7	1	1983
26	Journal of NIFOR	7	2	1985
27	NJPOS	8	1	1986
28	NJPOS	9	1	1988
29	NJPOS	10 & 11	1	1989/90
30	NJPOS	12	1	1991
31	NJPOS	13	1	19997
32	NJPOS	14	1	1998
33	NJPOS	15	1	2003

To support the work of research in the Institute (NIFOR) and the industry at large, compilation of bibliographies on these mandate commodities became imperative. According to Fadayomi (1996), bibliographies are up-to-date compilation of all published materials in a particular field. There are general and special or subject bibliographies. From the above submission, the NJPOS is a "Key Journal" on Palms in Nigeria. The articles in these issues were compiled into a bibliography and they were analyzed in this study.

Attempts to analyze the content of bibliographies in Nigeria have been recorded in literature. Two prominent ones are: a bibliographic analysis of articles published in the Nigerian Journal of Weed Science, 1988–1995

(Fadayomi, 1996) and Bibliographic analysis of articles: a study of African Journal of Library, Archives and Information Science, 1991–1997 (Olorunisola and Akinboro, 1998). These two studies proffered recommendations to enhance research in those subject areas.

### The objectives of the study

This is a pioneer study / analysis of the bibliography of Palms in Nigeria, which is needed because of the impact of the commodities on the Nigerian economy.

This study is aimed at:

- Determining the different categories of articles published in 1953–2003.
- Analyzing the pattern of authorship.
- Determining the frequency of authorship.
- Evaluating the articles published according to areas of research mandates.
- Determining the specific subject areas covered by articles in line with the mandate of the institution.
- Proffering useful advice to the editorial board for improvement on the journal.

### Methodology

All the 33 issues of the journal (NJPOS) published since inception in 1953 to 2003 were assembled and the articles that appeared were listed alphabetically by author according to the mandate crops of the institute. The articles were then grouped into their various categories for analysis. Data were presented in simple tables and analyzed by simple percentage.

### Results and Discussion:

As shown in table 2, out of a total of 297 articles featured in the journal from inception in 1953 to 2003, 236 (79%) were regular research articles and 20 (7%) research notes were compiled as bibliography and their contents analyzed in this study. Nine (9) short notes and 32 book reviews were not included in the bibliography because they were not adequately referred.

**Table 2: Categories of Articles Published in Vol. 1 15, 1953 2003.**

Articles Published	Freq.	%
Regular Research Article	236	79
Research Notes	20	7
Short communication	9	3
Book Review	32	11
	297	100

**Note: only those articles were compiled as bibliography and analyzed**

As the mandate of the institute increased in 1965, the number of articles published in the journal also increased as can be seen in vol. 4 no. 15 of 1965 where the issue has 8 articles published. The highest number of 15 research articles was published in 1989 and 1990 with issue nos. 29 after the mandate was expanded again to accommodate vegetable oil in 1987.

Therefore, increase in the scope of the journal was responsible for increase in the number of articles published in the journal. This assertion can be confirmed again in the future as the institute has been given a new mandate of shear butter research in 2005.

**Table 3: Productivity of Publication by Individual Author**

No. of Articles Published	Freq. of Author	%	Authors
11	2	1.3	D.O. Ataga and R.A. Bull
10	2	1.3	S.I. Agwu and S.U. Remison
9	2	1.3	A.R. Rees and R.D. Sheldrick
8	3	2.0	L.C. Chapas, 1.1 Onwubuya and R.B.H. Tinker
7	1	0.7	L.D. Sarnaaiji
6	6	3.9	C.I. Aisagbonhi, U.C. Amalu, F.O. Aya, C.O. Obasola, R.Ji Robertson, and J.M.A. Sly
5	5	3.3	F.O. Aderungboye, B.A. Ndon, U. Omoti, M.O. Otedoh, D.S. Udom, and A.C. Zeven
4	7	4.6	A.E. Agbimien, O. Asemota, A.F.M. Broekman, I.O. Obisean. C. Purvis, K. Rajagopalan and F.W. Toovey 1.
3	23	15.0	Several
2	28	18.3	Several
1	74	48.3	Several
	153	100	

### Frequency of Publication

Results in Table 3 showed that two authors published or contributed up to 11 articles, another two groups of authors have 10 and 9 articles published respectively while 74 (48.3%) authors had 1 article each. Most of the authors who contributed two or more articles are staff of the institute who may have carried out several researches over the years and reported the results in the journal. Of the 74 authors of one article each, 30 (40%) of

them collaborated with the institute staff to carry-out the research. This development should be encouraged.

**Table 4: Pattern of Authorship**

The pattern of authorship analyzed in Table 4 shows that 164 (64%) of the articles were single authored. This is followed by 59 (23.0%) with two authors, 26 (10.20%) had 3 authors, 5 (2.0%) had four authors, 1 (0.4%) had five and six authors respectively. The implication of this result is that most of the researchers are working alone. This result is different from findings by Fadayomi (1996) where a large percentage of articles published by weed scientists in a scientific journal had 2 authors. This development does not augur well for obtaining quality research results because current trend in scientific research favour multiple authorship as scientific studies today are multi disciplinary (Olurunsisola and Akinboro, 1991). Current results obtained in issues nos. 32 and 33 whereby 4, 5 and 6 authors collaborated to publish some articles should be encouraged and sustained.

Authorship	Freq.	%
Single Author	164	64.0
Two Authors	59	23.0
Three Authors	26	10.2
Four Authors	5	2.0
Five Authors	1	0.4
Six Authors	1	0.4
	256	100

**Table 5: Analysis by mandate crops**

Analysis of published articles according to mandate crops: oil palm, Coconut palm, date palm, raphia palm, vegetable oil and others of general interest, in Table 5, revealed that 188 (73.4%) research work in the Institute was geared towards oil palm and its related products while coconut palm had 21 (8.2%), Raphia palm 19 (7.4%) and Date palm 8 (3.1%). After the expanded mandate in 1965 issue no. 15, to include coconut, Date and Raphia Palms, about 50% of the total research efforts are still tilted toward the oil palm. Efforts should be made to increase research efforts into these other mandate crops to encourage their production and utilization.

**Table 5: Classification of Articles by Mandate Crops**

Crops	Frequency	%
Oil Palm	188	73.4
Coconut Palm	21	8.2
Date Palm	8	3.1
Raphia Palm	19	7.4
Vegetable Oil	4	1.6
General	16	6.3
	256	100

**Analysis by Mandate Research Subject Areas:**

Published articles were also analyzed by specific mandate subject areas to ascertain the spread of research work in these areas. Results in Table 6 showed that 103 (40.2) of the articles were on agronomy (crop management), while 58 (22.6%) were on pest and disease control (crop protection), 33 (12.9%) on genetic improvement (crop improvement,) while design/fabrication, and product utilization has 5 (2%) and 9 (3.5%) respectively.

In order to make the impact of the research work in the Institute felt more in the industry, the area of product utilization should be pursued vigorously to enable it attract investment into the section to boost the Nigerian economy. This will attract private sector participation and investment into plantation farming of the crops. While high yielding varieties of the crops have been developed, standardized agronomic practices, and disease and pest control resources abound, more efforts should be geared towards product processing and utilization, as well as extension services to help farmers adopt the recommended technologies to increase yield for them.

**Table 6 : Analysis of Articles by Mandate Research Subject Areas.**

Research Subject Areas	Freq.	%
Genetics and Breeding	33	12.9
Agronomy and Soil Management	103	40.2
Pest and Disease Control	58	22.6
Processing, Preservation and Storage	23	8.6
Design and Fabrication	5	2.0
Farming Systems	15	5.9
Extension Services	11	4.3
Product Utilization	9	3.5
	256	100

**Conclusion:**

This study has shown that the NJPOS is an important ("key") journal in palm science research in Nigeria. However, the publishing of the journal is irregular. Analysis showed that it has published articles made up of 236 research articles and 20 research notes by 153 authors. On productivity of authors, seventy four authors have only one article each, while 79 others have 2 or more publications with 2 authors having 11 articles each. Majority of the articles have one author while issues 32 and 33 have 5 & 6 authors each respectively. This shows a lack of team work among the scientists. Articles in the journals are mainly on oil palm and its related products while crop management, crops protection and crop improvement were the major research focus of the articles.

**Recommendations:**

- The editorial committee of this journal should use the results of this study to do a critical evaluation of the journal against set objectives.
- The Institute should evaluate their research programmes in order not to lay too much emphasis on one crop and a few specific research areas to the detriment of other mandate crops.
- The editorial board should encourage more research scientists to contribute and use the journal to publish their research work in order to make the journal more regular in frequency of publication.



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