

AUTOBIOGRAPHY OF PROF. OLUSIJI SUNDAY SOWANDE

Prof. Olusiji Sunday SOWANDE is a registered Animal Scientist (NIAS/RAS/00508) and a Professor of Ruminant Animal Production in the Department of Animal Production and Health, Federal University of Agriculture, Abeokuta, Nigeria. He was born on August 9, 1970 and had his primary and secondary education in Ibadan, Oyo State, Nigeria (1976 – 1987). His tertiary education up to PhD level was at the prestigious University of Agriculture, Abeokuta, Nigeria (now Federal University of Agriculture, Abeokuta, Nigeria) from 1988 – 2005. In the last nineteen years, he has been involved in teaching courses in Animal Production at both undergraduate and postgraduate levels. These includes Comparative Anatomy and Physiology of Farm Animal, Introduction to Animal Agriculture, Ruminant Animal Production and Husbandry, Entrepreneurial Skills in Animal Agriculture, Livestock Diseases and Control, Organic Livestock Production, Beef Animal Production, Dairy Production, Small Ruminant Fattening, Sheep and Goat Production and Beef Cattle Production System. Professor Sowande had supervised seventy-five undergraduate projects and over thirty-five postgraduate Dissertations/Theses as major or co-supervisor including six PhDs. He is a member of many professional body/society including Nigerian Society for Animal Production, Animal Science Association of Nigeria, Agricultural Society of Nigeria, International Goat Association and Nigerian Institute of Animal Science. He has to his credit eighty-seven publications including sixty-three journal articles and twenty-four refereed conference proceedings in both local and international outlets. Administratively, he had been Coordinator/Head, Department of Animal Production and Health (August 2007 - September 30, 2010), Deputy Dean, College of Animal Science and Livestock Production (February 2012 – February 2016) and member of Governing Council, Federal University of Agriculture, Abeokuta (February 2014 to date). He had served in various University statutory and ad-hoc committees both as chairman and member and had received eight commendation letters from various quarters within the University including the Senate of the Federal University of Agriculture, Abeokuta, Nigeria.

CURRICULUM VITAE OF PROF. O. S. SOWANDE

1. PERSONAL

- i. Full Name: SOWANDE Olusiji Sunday
- ii. Date of Birth: August 9, 1970
- iii. Place of Birth: Abeokuta
- iv. Age: 47 years
- v. Sex: Male
- vi. Marital Status: Married
- vii. Nationality: Nigerian
- viii. Town and State of Origin: Abeokuta, Ogun State
- ix. Contact Address: Department of Animal Production and Health,
Federal University of Agriculture, Abeokuta, P. M. B.
2240, Abeokuta, Ogun State.
- x. Phone Number: 08035847153
- xi. E-mail Addresses: sowandeos@funaab.edu.ng
ezekielolusiji@yahoo.com
ezekielolusiji@gmail.com
- xii. Present Post: Professor

2. EDUCATIONAL BACKGROUND

- a) Institutions Attended with Dates:
 - i. University of Agriculture, Abeokuta. 2001 - 2005
 - ii. University of Agriculture, Abeokuta. 1996 -1999
 - iii. University of Agriculture, Abeokuta. 1988 - 1994
 - iv. St. Michael's African Church Gram. Sch. Owode Ibadan. 1982 -1987
- b) Academic and Professional Qualifications with Dates:
 - i. Doctor of Philosophy 2005
 - ii. Master of Agriculture 1999
 - iii. Bachelor of Agriculture 1994
 - iv. WASC/SSCE 1987
- c) Prizes, Honours, Scholarship, National and International Recognition
 - i. A. G. Leventis (Egba) scholarship for postgraduate students: 1999.
 - ii. A. G. Leventis (Egba) scholarship for postgraduate students: 2001 – 2003.
- d) Professional Qualification:
 - i. Registered Animal Scientist (NIAS/RAS/0508)

3. WORK EXPERIENCE WITH DATES:

- i. Government College Ibadan. 1995 - 1999
- ii. Federal University of Agriculture, Abeokuta 1999 to date

UNDERGRADUATE COURSES		
Course Title	Course Code	Unit
Comparative Anatomy and Physiology of Farm Animal	APH201/ANP201	3

Introduction to Animal Agriculture	APH202	3
Ruminant Animal Production and Husbandry	APH301	3
Entrepreneurial Skill in Animal Agriculture	ANS303	2
Livestock Diseases and Control	APH403	3
Livestock Production Practices	FPY406	5
Dairy Production	APH506	3
Beef Animal Production	APH509	2
POSTGRADUATE COURSES		
Sheep and Goat Production Enterprise	APH701	2
Small Ruminant Fattening	APH707	2
Sheep and Goat Production	APH802	3
Beef Cattle Production System	APH803	3
Housing and Management of Farm Animals	APH807	3
Animal Traction	APH809	3

4. SPECIAL ASSIGNMENTS/COMMUNITY SERVICE

(I) Administrative Experience:

- a) Member, Governing Council of the Federal University of Agriculture, Abeokuta — February 6, 2014 to date.
- b) Member of Senate, Federal University of Agriculture, Abeokuta — October 1, 2008 to September 30, 2010; February 8, 2012 to date.
- c) Deputy Dean, College of Animal Science and Livestock Production, Federal University of Agriculture, Abeokuta — February 8, 2012 to February 7, 2016.
- d) Ag. Head, Department of Animal Production and Health, Federal University of Agriculture, Abeokuta – October 1, 2008 to September 30, 2010.
- e) Coordinator, Department of Animal Production and Health, Federal University of Agriculture, Abeokuta — August 1, 2007 to September 30, 2008.
- f) Coordinator, Postgraduate Programme, College of Animal Science and Livestock Production, Federal University of Agriculture, Abeokuta — February 8, 2012 to February 7, 2016.
- g) Chairman, Small Ruminant Technical Committee — March 2008 to May 2010.
- h) Member, COLANIM Board of Studies — August 2007 to September 30, 2010.
- i) Member, Board of Postgraduate School - August 2007 to September 30, 2010; February 2012 to February 7, 2016.
- j) Chairman, Academic Staff Union of Universities, Federal University of Agriculture, Abeokuta Branch – February 2010 to 2012.

- k) Convener, Agriculture Committee of National Executive Council, Academic Staff Union of Universities – September 2012 to September, 2014
- l) Resource Person to National Executive Council, Academic Staff Union of Universities – September 2014 to date.

(II) Membership of Committees/Panels:

Regular Committees

- a) Chairman, Small Ruminant Technical Committee — March 2008 to May 2010.
- b) Member, Cattle Management Technical Committee — Feb. 1999 to May 2010.
- c) Member, University Sports Committee — 1999 to 2010.
- d) Member, Senate Committee on Examination Results —2006 to 2010.
- e) Member, COLERM Committee on Examination Results —2010 to date
- f) Member, COLANIM Board of Studies —Aug. 2007 to Sept. 2010.
- g) Member, COLANIM Board — June 1999 to date.
- h) Member, COLANIM Postgraduate Committee Oct. 2005 to date.
- i) Member, Livestock Production Research Committee (IFSERAR) —2010 to date.
- j) Member, representing Senate in the Budget Monitoring Committee of the Governing Council, Federal University of Agriculture, Abeokuta – 2012 to date

Ad Hoc Committees

- k) Member, Investigation panel on the reported accident involving COLERM Jeep and another vehicle at Abuja. (December, 2008)
- l) Member, Investigation panel on the case of insubordination and gross disrespect against Mr. Olaonipekun, B. I. (March, 2009)
- m) Member, Investigation panel on the case of undue absence from duty against Mrs. J. O. Carrena of Department of Home Science and Management. (December, 2009)
- n) Member, Senate committee on the development of new programme for processing results in the University. (February, 2010)
- o) Member, Investigation panel on the registration of an unqualified candidate — Miss Osatuore, Ajah Omorodion for 2006/2007 academic session (April, 2011)
- p) External examiner for M. Tech. Oral Examination of Abioye, Oluwaseyi Enitan, Department of Animal Production and Health, Ladoko Akintola University of Technology, Ogbomoso, Oyo State. (September, 2011)
- q) Member, Mock Accreditation Team for the Food Science and Technology programme, Federal University of Agriculture, Abeokuta. (June, 2012)
- r) Member, Committee on the review of the University Calendar for 2013 – 2015. (July, 2012)
- s) Member, Committee on the review of the existing rules and regulations governing postgraduate studies in Federal University of Agriculture, Abeokuta. (February, 2013).
- t) Member, committee on policy paper in support of academic staff undergoing postgraduate studies in FUNAAB. (March, 2013)
- u) Member, Representing ASUU Chairman on the investigation panel to look into an alleged case of plagiarism involving an academic staff in the Department of Mechanical Engineering – Dr. O. S. Olokode. (June, 2013)
- v) Member, committee for the development of new policy on part-time degree programmes in the University. (February, 2014)
- w) Member, Investigation panel on the query issued to bursar by the Governing Council of FUNAAB. (June, 2014).
- x) Member, committee for the development of new policy on part-time degree programmes in the University. (February, 2014)

(III) **Community Service**

- a. Secretary, Editorial Board of The Alumni Magazine published by the Federal University of Agriculture, Abeokuta Alumni Association (2001 to 2004).
- b. Staff Adviser, Baptist Students Fellowship Federal University of Agriculture, Abeokuta (2001 to date).
- c. Treasurer, Victory Baptist Church Youth Fellowship Obantoko, Abeokuta (2001 to 2003).
- d. Prayer Coordinator, Victory Baptist Church Obantoko, Abeokuta (2001 to 2003).
- e. President, Victory Baptist Church Youth Fellowship Obantoko, Abeokuta (2005).
- f. Financial Secretary, Men's Missionary Union, Abeokuta North-East Baptist Association (2005 to 2010).
- g. Assistant Recording Secretary, Ogun State Baptist Conference (2010 to date)
- h. Welfare Secretary, Academic Staff Union of Universities, Federal University of Agriculture, Abeokuta Branch (February 2006 to February 2008).
- i. Vice Chairman, Academic Staff Union of Universities, Federal University of Agriculture, Abeokuta Branch (February 2008 to February 2010).
- j. Chairman, Academic Staff Union of Universities, Federal University of Agriculture, Abeokuta Branch (February 2010 to March 2012).
- k. Staff Adviser, National Association of Animal Science Students, FUNAAB Branch. (2004 to date).
- l. Convener, Agriculture Committee of the National Executive Council, Academic Staff Union of Universities (September 2012 to September 2014).
- m. Resource Person to National Executive Council, Academic Staff Union of Universities (September 2014 to May 2016).
- n. Zonal Coordinator, Lagos Zone, Academic Staff Union of Universities (June 2016 to date).

(IV) **National/International Assignments**

- a. Supervisor, Unified Tertiary Matriculation Examination conducted by Joint Admission and Matriculation Board. (2010 – 2013)
- b. Member, committee of expert for *Archivos de Zootecnia* Journal by the Institute of Animal Science, University of Cordoba, Spain. (October, 2013 to date)
- c. Examiner, Graduate Animal Scientists' Examination conducted by Nigerian Institute of Animal Science. (July, 2014 to date)

5. TRAINING PROGRAMMES ATTENDED

- a. Strategic Plan for Research and Extension organized by the Central Strategic Planning Sub-committee on Research and Extension. University of Agriculture, Abeokuta. October 27, 1999.
- b. Training Workshop on Research Methodology for Young Academics Organized by the Curriculum, Training, Scientific and Technical Committee of the Nigerian Institute of Food Science and Technology. University of Agriculture, Abeokuta. July 26 — 29, 2000.
- c. AGORA, HINARI and OARE Training of Trainers Workshop Organized by Information Training and Outreach Centre for Africa (ITOCA) in conjunction with Food and Agricultural Organization and World Health Organization. University of Ibadan, Ibadan. June 26— 29, 2007.
- d. Step-down training on gender mainstreaming. University of Agriculture, Abeokuta, Nigeria. November 27, 2007.
- e. First National workshop on curriculum development for organic agriculture in tertiary institutions sponsored by the University of Agriculture, Abeokuta and Coventry University, U. K. University of Agriculture, Abeokuta, Nigeria. March 11 — 15, 2008.

- f. West African Network on Organic Agriculture Research and Training (EU Sponsored) staff exchange/mobility capacity building programme. Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. November 16 to December 7, 2009.
- g. One day retreat for University Professors on developing strategies to reposition University Professors towards a greater future organized by the Federal University of Agriculture, Abeokuta. April 4, 2013.
- h. Leadership training workshop on meeting the challenges of effective leadership in the Nigerian University System organized by Academic Staff Union of Universities, National Secretariat, University of Abuja. March 27 - 30, 2014.
- i. One day strategic plan workshop on Strategic Plan (2014 – 2020): Roadmap Towards a World Class University organized by the Federal University of Agriculture, Abeokuta. May 27, 2014.

6. COMMENDATION

- a. Commendation letter from Dean, Students Affairs, for effective, efficient and successful conduct of 2004 Inter-Collegiate Sports Competition (2004).
- b. Certificate of merit in recognition of outstanding and remarkable service to 2003/2004 session's Farm Practical Year programme by Nigeria Association of Agricultural Students, FUNAAB Branch (2004).
- c. Commendation letter from Dean, Students Affairs, for outstanding service to the University during 2006 Inter-Collegiate Sports Competition (2006).
- d. Commendation letter from Dean, COLANIM for showing great sense of responsibility, commitment and hard work as the Coordinator of Department of Animal Production and Health (2008).
- e. Commendation letter from University Senate through the Registrar and Secretary to Senate for high level of dedication and commitment in ensuring proper scrutiny of 2006/2007 second semester examination results in record time for Senate approval as a member of Senate Committee on Examination Results (2008).
- f. Commendation by the University Senate for generous services rendered for the progress of the University through the activities of Senate Committee on Examination Results. (2010)
- g. Commendation by the Dean, COLANIM for devoted and efficient services rendered to the Department of Animal Production and Health as the Ag. HOD from October, 2008 — September, 2010. (2010)

7. MEMBERSHIP OF PROFESSIONAL BODIES

- a. Member, Nigerian Society for Animal Production.
- b. Member, Animal Science Association of Nigeria.
- c. Member, Agricultural Society of Nigeria.
- d. Member, International Goat Association.
- e. Member, Nigerian Institute of Animal Science (Reg. Num. NIAS/RAS/00508)
- f. Member, Organic Agriculture Project in tertiary Institutions in Nigeria (OAPTIN)

8. RESEARCH INTEREST OR COMMISSIONED PROJECT

- i. In progress
 - a. Response of growing and pregnant West African dwarf goats to different levels of DHA rich Algae biomass.
 - b. Growth/reproductive performance and oxidative stress status of growing and pregnant West African dwarf goats fed diet containing different levels of Selenium, Vitamins C and E or their combinations
 - c. Effect of diets supplemented with different copper sources (Conventional, Organic and Nano Cu) on the growth performance and oxidative stress biomarkers in West African dwarf goats.

- ii. Completed
 - a. Welfare and productivity of West African Dwarf does and kids: Influence of dietary inclusion of poly-unsaturated fatty-acid.
 - b. Effect of management systems, seasons and nutrient density on oxidative stress in West African dwarf goats.
 - c. Response of West African dwarf goats to raw and fermented malted sorghum sprout.
 - d. Performance characteristics and blood profile of goats reared under two on-farm management systems.
 - e. Efficacy of *Newbouldia laevis* extract and nutrient density on gastrointestinal nematode in sheep managed semi-intensively.
 - f. Effect of feed quality restriction on pregnancy, litter size and postpartum performance in WAD goat.

9. PUBLICATIONS

A) Thesis/Dissertation

- a. **Sowande, O. S. 1994.** Duck Production in Odeda Local Government, Ogun State. B. Agric. Project, University of Agriculture Abeokuta. 63 pages.
- b. **Sowande, O. S. 1999.** Utilization of Magnesium Salts by West African Dwarf Goats. M. Agric. Dissertation, University of Agriculture Abeokuta. 53 pages
- c. **Sowande, O. S. 2005.** Response of West African Dwarf Sheep to Dry Season Feed Based on Preserved Elephant Grass, Layers' Droppings and Cassava Peels. Ph.D. Thesis, University of Agriculture Abeokuta. 178 pages.

B) Journal Articles:

- 1. **Sowande, O. S.**, Aina, A. B. J., Oduguwa, O. O., Biobaku, W. O. and Abiola, S. S. 2000. The performance of West African Dwarf goats on dietary magnesium sulphate supplements. ***Tropical Journal of Animal Science***. 3(2): 21 — 25. Published by Animal Science Association of Nigeria. Available on line at <http://ajol.info/index.php/tjas/issue/view/6792> . **Nigeria.**
- 2. **Sowande, O. S.** and Aina, A. B. J. 2001. Magnesium nitrate as dietary additive in the nutrition of West African Dwarf goats. ***Archivos de Zootecnia***. 50(191): 335 — 341. Published by the University of Corboda, Spain. Available online at http://www.uco.es/organiza/servicios/publica/az/php/az.php?idioma_global=0&revista=50&indice=17 . **Spain.**
- 3. Aina, A. B. J., Yusuf, A. O., Sogbade, L. A. and **Sowande, O. S.**, 2002. Evaluation of different combinations of palm kernel cake and cotton seed cake — based diets on the performance of West African Dwarf goats. ***Nigerian Journal of Animal Production***. 29(2): 189 — 194. Published by Nigerian Society for Animal Production. Available on line at www.cababstractsplus.org/abstract/Abstract.aspx?AcNo=20043076573. **Nigeria.**
- 4. Aina, A. B. J., Oluwasanmi, O. R., Oyesanya, N. K., Farinde, A. O., Akanbi, O. E., Fadipe, T. A. and **Sowande, O. S.** 2004. Comparative rumen degradability of forages, agricultural by-products and baobab bark in sheep. ***Archivos de Zootecnia***. 53(203): 321— 324. Published by the University of Corboda, Spain. Available online at http://www.uco.es/organiza/servicios/publica/az/php/az.php?idioma_global=0&revista=53&indice=1 . **Spain.**

5. **Sowande, O. S.**, Olumotanmi, O.O. and Osineye, M. O. 2004. The effect of Alkali from woodash solution on the chemical composition and in vitro digestibility of sawdust. *ASSET Series A*. 4(1):49-54. Published by University of Agriculture, Abeokuta, Nigeria. Available online at www.cababstractsplus.org/abstracts/Abstract.aspx?AcNo=20063026667. **Nigeria**.
6. **Sowande, O. S.**, Fasae O. A., Ojedokun, O. J., Okunola, O. S. and Aina, A. B. J. 2007. Comparative evaluation of blood mineral status of West African dwarf sheep and goats managed under extensive and semi-intensive systems of management. *Nigerian Journal of Animal Production*. 34(1): 94 - 99. Published by Nigerian Society for Animal Production. **Nigeria**.
7. **Sowande, O. S.**, Olayode, B.A.A. and Egbeyale, L.T. 2007. Effect of diet quality on feeding time and performance of West African dwarf sheep. *Archivos de Zootecnia*. 56(216): 943 - 946. Published by University of Corboda, Spain. Available online at http://www.uco.es/organiza/servicios/publica/az/php/az.php?idioma_global=0&revista=56&indice=136. **Spain**.
8. Bawala, T. O., **Sowande, O.S.**, Talabi, A. O., Rosanwo, F. O., Folorunsho, O. R. and Fajimi, A. K.2007. Microbiological studies on the implication of harnessing bovine blood rumen content in livestock feeds. *Tropical Journal of Animal Science*. 10 (1): 177 — 182. Published by Animal Science Association of Nigeria. **Nigeria**.
9. **Sowande, O. S.** and Idowu, O.O. 2007. Effect of period of concentrate supplementation on performance of goats grazing natural pasture. *Tropical Journal of Animal Science*. 10 (2): 499— 503. Published by Animal Science Association of Nigeria. **Nigeria**.
10. Oluboyede, T. A., **Sowande, O. S.** and Arigbede, O. M. 2007. Effect of types of concentrate supplement on feed intake and performance of West African Dwarf sheep fed *Panicum maximum* as basal diet. *Moor Journal of Agricultural Research*. 8(1): 33 - 39. Published by Institute for Agricultural Research and Training, Ibadan, Nigeria. Available online at <http://moorjournal.us/archives.php>. **Nigeria**.
11. **Sowande, O.S.**, Odufowora, E.B., Adedokun, A.O. and Egbeyale, L.T. 2008. Mineral concentration in blood of West African dwarf sheep and goats grazing natural pastures during wet and dry seasons. *Archivos de Zootecnia*. 57 (218): 275 - 278. Published by the University of Corboda, Spain. Available online at http://www.uco.es/organiza/servicios/publica/az/php/az.php?idioma_global=0&revista=57&indice=142. **Spain**.
12. **Sowande, O. S.** and Sobola, O.S. 2008. Body measurements of West African dwarf sheep as parameters for estimation of live weight. *Tropical Animal Health and Production*. 40 (6): 433 –439. Published by Springer UK in association with Centre for Tropical Veterinary Medicine, University of Edinburgh, UK. Available online at <http://link.springer.com/journal/11250/40/6/page/1>. **United Kingdom**.
13. **Sowande, O.S.**, Aina, A. B. J., Oguntona, E. B., Fanimu, A. O., Adewole, F. A. and Adesanya, O. A. 2008. Storage characteristics, digestibility and nitrogen balance in West African dwarf sheep fed preserved elephant grass, caged layer waste and cassava peel diets during dry season. *Nigerian Journal of Animal Production*. 35 (2): 223 - 230. Published by Nigerian Society for Animal Production. **Nigeria**.

14. **Sowande, O. S.**, Aina, A. B. J., Oguntona, E. B., Fanimu, O. A., Unaka, V. U., Hassan, T. A. and Oseni, M. O. 2008. Performance, blood biochemical constituents and mineral balance of West African dwarf sheep fed preserved Elephant grass, layers' droppings and cassava peel diets during dry season. *Nigerian Journal of Animal Production*. 35(1): 90 - 102. Published by Nigerian Society for Animal Production. **Nigeria**.
15. **Sowande, O. S.**, Oyewale, B. F. and Iyasere, O.S. 2010. Age- and sex-dependent regression models for predicting the live weight of West African Dwarf goat from body measurements. *Tropical Animal Health and Production*. 42 (5): 969 - 975. Published by Springer UK in association with Centre for Tropical Veterinary Medicine, University of Edinburgh, UK. Available online at <http://link.springer.com/journal/11250/42/5/page/1>. **United Kingdom**.
16. Egbeyale, L. T., Abiola, S. S., Fanimu, A. O., Oduguwa, O.O., Sogunle, O. M. and **Sowande, O. S.** 2010. Effect of chemical treatments on microflora species on eggshell and hatchability of broiler eggs. *Nigerian Journal of Animal Production* 37(1): 25 - 33. Published by Nigerian Society for Animal Production. **Nigeria**.
17. Fasae, O. A., **Sowande, O. S.** and Popoola, A. A. 2010. Evaluation of selected leaves of trees and foliage of shrubs as fodder in ruminant production. *Journal of Agricultural Science and Environment*. 10(2): 36 – 44. Published by Federal University of Agriculture, Abeokuta. Available online at <http://journal.unaab.edu.ng/index.php/JAgSE/issue/> . **Nigeria**.
18. Okwelum, N., Iposu, S. O., **Sowande, O. S.**, Smith, O. F., Takeet, M. I., Olugbogi, E. I. and Rahman S. A. 2011. Prevalence of trypanosome infection in trade cattle at slaughter in Lafenwa abattoir, Abeokuta, Nigeria. *Journal of Commonwealth Veterinary Association* **27: 239 – 241**. Published by Commonwealth Veterinary Association in conjunction with European Union, Berlin. (**Germany**).
19. Yusuf, A. O., **Sowande, O. S.**, Iposu O. S., Sonibare A. O., Sogunle, O. M., and Adegbite J. A. 2011. Effect of diets containing different nutrient density on performance and faecal egg count of West African Dwarf rams. *Nigerian Journal of Animal Production*. 38: 155 - 160. Published by Nigerian Society for Animal Production. **Nigeria**.
20. Adeleye, O. O., **Sowande, O. S.**, Bawala, T. O., Bemji, M. N., Olayode, B. A. and Oni, A. O. 2011. Effects of feed restriction and realimentation on performance and nitrogen utilisation in growing West African dwarf rams. *Journal of Agricultural Science and Environment*. 11 (2):76-89. Published by Federal University of Agriculture, Abeokuta. **Nigeria**.
21. Oni, A. O., Arigbede, M.O., **Sowande, O. S.**, Anele, U. Y., Oni, O.O., Onwuka, C. F. I., Onifade, O. S., Yusuf, K. O., Dele, P. A. and Aderinboye, R. Y. 2012. Haematological and serum biochemical parameters of West African dwarf goats fed dried cassava leaves based concentrate diets. *Tropical Animal Health and Production*. 44(3): 483 – 490. Published by Springer UK in association with Centre for Tropical Veterinary Medicine, University of Edinburgh, UK. Available online at <http://link.springer.com/journal/11250/44/3/page/1>. **United Kingdom**.
22. **Sowande, O. S.**, Orebela, B. A. and Iyasere, O. S. 2012. Age- and sex-dependent regression parameters for estimating live weight from body measurements of West African Dwarf sheep. *Nigerian Journal of Animal Production*. 39: 169- 179. Published by Nigerian Society for Animal Production. **Nigeria**.

23. **Sowande, O. S.**, Martins, O. A., Salami, Z. F. and Egbeyale, L. T. 2012. Effects of method of offering forage and concentrate on growth performance, blood biochemical constituents and carcass characteristics of West African dwarf sheep. ***Journal of Applied Agricultural Research***. 4: 55-60. Published by Agricultural Research Council of Nigeria. **Nigeria**.
24. Ayankoso, M. T., **Sowande, O. S.**, Iposu, S. O., Sonibare, O. A., Oni, A. O., Sowande, O. K. and Adekunle, A. 2012. Effects of diet containing different protein-energy densities on the performance of semi-intensively raised West African dwarf sheep. ***Journal of Applied Agricultural Research***. 4: 53 - 59. Published by Agricultural Research Council of Nigeria. **Nigeria**.
25. Yusuf, A. O., Bawala, O. T., **Sowande, O. S.** and Adegbenjo, F. D. 2012. Performance and digestibility of West African Dwarf sheep fed varying forage and concentrate ratios. ***Nigerian Journal of Animal Science***. 14: 113 - 120. Published by Animal Science Association of Nigeria. Available online at <http://www.ajol.info/index.php/tjas>. **Nigeria**.
26. Ayankoso, M. T., **Sowande, O. S.**, Iposu, S. O., Sonibare, O. A., Oni, A. O., Sodipe, O. G., Sowande, O. K. and Adekunle, A. 2012. Effect of diets with different protein-energy density on the gastrointestinal nematode status of semi- intensively managed West African dwarf sheep. ***Nigerian Journal of Animal Science***. 14: 164 - 173. Published by Animal Science Association of Nigeria. Available online at <http://www.ajol.info/index.php/tjas>. **Nigeria**.
27. Yusuf, A. O., Oyebanji, O. O., Yusuf, O. A., Ekunseitan, D. A., Adeleye, K. A., **Sowande, O. S.** and Fasae, O. A. 2012. Blood profile of West African dwarf goats fed *Panicum maximum* supplemented with *Newbouldia laevis* leaves. ***Bulletin of Animal Health and Production in Africa***. 60: 481 – 490. Published by African Union Inter-African Bureau for Animal Resources, Kenya. <http://www.ajol.info/index.php/bahpa>. **Kenya**.
28. Yusuf, A. O., **Sowande, O. S.**, Sogunle, O. M., Akinbami, V. A., Oyebanji, O. O., Yusuf, O. A., Ekunseitan, D. A., Adeleye, K. A. and Aina, A. B. J. 2013. Accessing the nutritional composition and phytochemical screening of *Panicum maximum* and *Newbouldia laevis* leaves. ***Nigerian Journal of Animal Production***. 40(2): 161- 167. Published by Nigerian Society for Animal Production. **Nigeria**.
29. Dele, P. A., Olanite, J. A., Arigbede, O. M., **Sowande, O. S.**, Ojo, V. O. A., Jolaosho, A. O., Idehen, J. O. and Amole, T. A. 2013. Microelement contents of two *Panicum maximum* varieties as influenced by manure and season. ***Nigerian Journal of Animal Production***. 40 (1): 160 - 171. Published by Nigerian Society for Animal Production. **Nigeria**.
30. Oni, A. O., **Sowande, O. S.**, Oduguwa, B. O., Yusuf, K. O., Arigbede, O. M. and Onwuka, C. F. I. 2013. Haematological and serum biochemical parameters of West African Dwarf goats fed ensiled cassava leaves with or without molasses and caged layer waste. ***Nigerian Journal of Animal Production***. 40(1): 134 - 142. Published by Nigerian Society for Animal Production. **Nigeria**.
31. Egbeyale, L. T., Sogunle, O. M., Abiola, S. S., Ozoje, M. O., **Sowande, O. S.** and Adeleye, O. O. 2013. Effect of weight and strain on the egg component utilization and embryonic weight during incubation. ***Archivos de Zootecnia***. 62(238): 191 - 198. Published by University of Corboda, Spain. Available online at

http://www.uco.es/organiza/servicios/publica/az/php/az.php?idioma_global=0&revista=62&indice=175. Spain.

32. Oduguwa, B. O., Adedeji, A. A., **Sowande, O. S.**, Isah, O. A. and Amole, T. A. 2013. Estimation of live weight from linear body measurements of three African breeds of cattle under extensive management system in Nigeria. *Nigerian Journal of Animal Science*. 15: 1 – 9. Published by Animal Science Association of Nigeria. Available online at <http://www.ajol.info/index.php/tjas>. Nigeria.
33. Oni, A. O., Oduguwa, B. O., **Sowande, O. S.**, Omemu, A. M., Atayese, A. O., Dele, P. A., Aderinboye, R. Y., Arigbede, O. M. and Onwuka, C. F. I. 2013. Effects of molasses and storage period on the chemical, microbial and fermentation characteristics of guinea grass - cassava leaves silage. *Bulletin of Animal Health and Production in Africa*. 61: 587 – 596. Published by African Union Inter-African Bureau for Animal Resources, Kenya. Available online <http://www.ajol.info/index.php/bahpa>. Kenya.
34. Ayo-Ajasa, O. Y., Aina, A. B. J., Agaviezor, B. O., Ozoje, M. O. and **Sowande, O. S.** 2014. Variation in growth and linear Body measurements of rabbits due to generation differences, housing systems, sex and season. *American Journal of Experimental Agriculture*. 4(11): 1339-1347. Published by Sciencedomain International, USA. Available online at www.sciencedomain.org. DOI : 10.9734/AJEA/2014/6745. United States of America.
35. Olayode, B. A., **Sowande, O. S.**, Bemji, M. N., Bawala, T.O., Ajagbe, O.O. and Oni, A. O. 2014. Effect of feed quality restriction on changes in body measurements and carcass characteristics of West African dwarf sheep. *Nigerian Journal of Animal Production*. 41(2): 116 - 123. Published by Nigerian Society for Animal Production. Nigeria.
36. Okwelum, N. I., Iposu, S. O., **Sowande, O. S.**, Smith, O. F., and Takeet, M. I. 2014. Epidemiological survey of haemoparasitic infection in trade cattle at slaughter in Lafenwa abattoir, Ogun State, Nigeria. *Nigerian Journal of Animal Production*. 41(2): 182 - 186. Published by Nigerian Society for Animal Production. Nigeria.
37. Oni, A. O., **Sowande, O. S.**, Oni, O. O., Aderinboye, R. Y., Dele, P. A., Ojo, V. O. A., Arigbede, O. M. and Onwuka, C. F. I. 2014. Effect of additives on fermentation of cassava leaf silage and ruminal fluid of West African dwarf goats. *Archivos de Zootecnia*. 63: 449 – 459. Published by University of Corboda, Spain. Spain.
38. Sodipe, O. G., **Sowande, O. S.**, Bello, R. A., Odebiyi, C. O. and Abioja, M. O. 2014. Seasonal variation in physiological and haematological indices of West African dwarf goats. *Nigerian Journal of Animal Science* 16: 28 - 38. Published by Animal Science Association of Nigeria. Nigeria.
39. Sodipe, O. G., Sowande, O. S., Abioja, M. O., Adeleye, O. O., Akintayo, H. and Adebowale, R. A. 2014. Haematological and physiological parameters of West African dwarf goats as influenced by coat variation and sex. *Bulletin of Animal Health and Production in Africa*. 62: 305 – 314. Published by African Union Inter-African Bureau for Animal Resources, Kenya. Kenya.

40. Okwelum, N. I., Iposu, S. O., **Sowande, O. S.** and Smith, O. F. 2014. Leukocyte profile of different breeds of the Nigerian cattle in haemoparasitic infection. ***Bulletin of Animal Health and Production in Africa***. 62: 285 – 290. Published by African Union Inter-African Bureau for Animal Resources, Kenya. **Kenya**.
41. Adewumi, O. O., Yusuff, R. O., Aina, A. B. J., **Sowande, O. S.**, Fasae, O. A., Ojo, V. O. A. and Egbeyale, L. T. 2014. Feed intake, digestibility, milk pH and blood parameters of West African dwarf sheep fed dietary fibre-protein levels. ***Journal of Animal Production Research***. 26: 79-89. Published by National Animal Production Research Institute, Ahmadu Bello University, Zaria, Nigeria.
42. Abatan, O., Oni, A. O., Adebayo, K., Iposu, S., **Sowande, O. S.** and Onwuka, C. F. I. 2015. Effects of supplementing cassava peels with cassava leaves and cowpea haulms on the performance, intake, digestibility and nitrogen utilization of West African Dwarf goats. ***Tropical Animal Health and Production***. 47: 123 - 129. Published by Springer UK in association with Centre for Tropical Veterinary Medicine, University of Edinburgh, UK. **United Kingdom**.
43. Daramola, J. O., Abiona, J. A., Smith, O. F., Isah, O. A., **Sowande, O. S.**, Olaniyi, M. O. and Olanite, J. A. 2015. Effect of Mucuna (*Mucuna pruriens*) on spermograms of West African dwarf bucks. ***Tropical and Subtropical Agroecosystems***. 18(2): 145 – 150. Published by
44. Ayo-Ajasa, O. Y., Aina, A. B. J., **Sowande, O. S.**, Egbeyale, L. T., Ozoje, M. O., Agaviezor, B. O. and Abel, F. A. S. 2015. Haematology and serum profile of rabbits due to generation interval, housing systems and sex. ***Nigerian Journal of Animal Production***. 42(1): 60 - 70. Published by Nigerian Society for Animal Production. **Nigeria**.
45. Ayo-Ajasa, O. Y., Aina, A. B. J., **Sowande, O. S.**, Egbeyale, L. T., Ozoje, M. O., Oso, A. O., Abiona, B. O. and Abel, F. A. S. 2015. Effect of generational differences, housing systems and seasonal variations on the reproductive performance of rabbits raised in humid tropics. ***Nigerian Journal of Animal Production***. 42(2): 103 - 110. Published by Nigerian Society for Animal Production. **Nigeria**.
46. Yusuf, A. O., Sonibare, O. A., Sodipe, O. G. and **Sowande, O. S.** 2016. *Newbouldia laevis* leaves extract: Nutritive value, phytochemical constituents and effect on growth performance and faecal egg count reduction in West African dwarf rams raised semi-intensively. ***Nigerian Journal of Animal Production***. 43(1): 239 - 246. Published by Nigerian Society for Animal Production. **Nigeria**.
47. Yusuf, A. O., Ademokoya, A. J., Ogun, M. A., Raheem, A. A., Odunfa, O. A., Akinyemi, B. T., Adelus, O. O. and **Sowande, O. S.** 2016. Performance and haematological parameters of West African dwarf goats fed varying levels of *Newbouldia laevis* inclusion. ***Archivos Latinoamericanos de Produccion Animal***. 24(1):63 – 68. Published by Latin American Association of Animal Production. **Venezuela**.
48. Saka, A. A., **Sowande, O. S.**, Oni, O. A., Adewumi, O. O., Ogunleke, F. O. and Sodipe, O. G. 2016. Performance evaluation and haematological parameters of West African dwarf goats

- fed graded level of raw and fermented malted sorghum sprout. **Nigerian Journal of Animal Science**. 18(2): 444 - 457. Published by Animal Science Association of Nigeria. **Nigeria**.
49. Oderinwale, O. A., Oluwatosin, B. O., Bemji, M. N. and **Sowande, O. S.** 2016. Effects of concentrate diets supplementation of pregnant Kalahari Red goats grazed on *Chloris gayana* on performance characteristics in South-Western Nigeria. **Options Mediterranean, Series A**: 261-267. Published by International Centre for Advance Mediterranean Agronomic Studies. **Spain**.
50. Sonibare, A. O., Sowande, O. S., Iposu, S. O., Luka, J., Ayankoso, M. and Egbetade, A. O. 2016. Performance and parasitology of semi-intensively managed West African dwarf sheep exposed to gastrointestinal helminth infected paddocks and varied protein-energy feeds. **Iran Journal of Parasitology**. 11 (4): 559 – 567. Published by Tehran University of Medical Sciences in conjunction with Iranian Society of Parasitology. **Iran**.
51. Oni, O. A., Yusuf, A. O., Oni, O. O., Adelusi, O. O., Areegbe, A. O., **Sowande, O. S.** and Onwuka, C. F. I. 2017. The impact of extraction methods on chemical composition and phytochemical constituents of common browse plants and selected tree species. **Nigerian Journal of Animal Science**. 19(1): 85 - 100. Published by Animal Science Association of Nigeria. **Nigeria**.
52. Dele, P. A., Akinyemi, B. T., Amole, T. A., Okukenu, O. A., Sangodele, O. T., **Sowande, O. S.**, Olanite, J. A., Arigbede, O. M. and Jolaosho, A. O. 2017. Effect of manure type and season of harvest on the forage yield, quality and macro-elements of two *Panicum maximum* varieties. **Nigerian Journal of Animal Science**. 19(1): 265 - 282. Published by Animal Science Association of Nigeria. **Nigeria**.
53. Adewumi, O. O., Okwelum, N., Williams, T. J., James, I. J., **Sowande, O. S.**, Akinlabi, E. T., Osunlaja, Adeleye, Omololu, B. A., Mufutau, S. O. and Jinad, R.O. 2017. Effect of protein dietary protein levels on milk component, udder parameters, blood and physiological indices of West African dwarf goat. **Nigerian Journal of Animal Production**. 44(2): 161 - 172. Published by Nigerian Society for Animal Production. **Nigeria**.
54. Oderinwale, O. A., Oluwatosin, B. O., **Sowande, O. S.**, Bemji, M. N., Amosu, S. D., Sanusi, G. O. 2017. Concentrate supplementations of grazing pregnant Kalahari Red goats: Effects on pregnancy variables, reproductive performance, birth types and weight of kids. **Tropical Animal Health and Production**. 49: 1125 - 1133. Published by Springer UK in association with Centre for Tropical Veterinary Medicine, University of Edinburgh, UK. **United Kingdom**.
55. Adeyanju, S. O., Arigbede, O. M., Oluwatosin, B. O. and **Sowande, O. S.** 2017. *In-vitro* gas production characteristics of the extracts and residues of four multipurpose tree seeds. **Nigerian Journal of Agriculture, Food and Environment**. 13(2): 137-142. Published by Faculty of Agriculture, University of Uyo, Nigeria. **Nigeria**.
56. Oni, A. O., Abatan, A., Adebayo, K., **Sowande, O. S.**, Iposu, S. O. and Onwuka, C. F. I. 2017. Effects of supplementing cassava peels with cassava leaves and cowpea haulms on the rumen environment and blood profile parameters of West African dwarf goats. **Archivos de Zootecnia**. 66: 395 – 402. Published by University of Corboda, Spain. **Spain**.

57. Yusuf, A. O., Mlambo, V., **Sowande, O. S.** and Solomon, R. 2017. Oxidative stress biomarkers in West African Dwarf goats reared under intensive and semi-intensive production systems. ***South African Journal of Animal Science***. 47 (3): 281 – 289. Published by the South African Society for Animal Science. **South Africa**.
58. Oni, A. O., Ajayi, O. M., **Sowande, O. S.**, Adenaike, A. S. and Onwuka, C. F. I. 2017. Effects of selected multipurpose, medicinal and aromatic plants on in vitro methane production and microbial diversity. ***Bulletin of Animal Health and Production in Africa***. 65: 577 – 589. Published by African Union Inter-African Bureau for Animal Resources, Kenya. **Kenya**.
59. Adekunle, E. O., Daramola, J. O., Onagbesan, O. M. and **Sowande, O. S.** 2017. Cryosurvival of goat spermatozoa in tris-egg yolk extender supplemented with vitamin E. ***Bulletin of Animal Health and Production in Africa***. 65: 819 – 826. Published by African Union Inter-African Bureau for Animal Resources, Kenya. **Kenya**.
60. Olaniyi, T. A., Aina, A. B. J., **Sowande, O. S.** and Williams, T. J. 2018. Influence of dietary mineral sources on milk yield and composition of West African dwarf does. ***Journal of Agricultural Science and Practice***. 3:19 – 26. Published by Integrity Research Journals.
61. Ikyume, T. T., **Sowande, O. S.**, Dele, P. A., Yusuf, A. O., Monday, S., Egunjobi, O. K. and Fatoba, O. 2017. Effects of varying levels of garlic (*Allium sativum*) powder on growth, apparent nutrient digestibility, rumen ecology, blood profile and cost analysis of feeding West African dwarf goats. ***Malaysian Journal of Animal Science***. 20(2):61 – 74. Published by Malaysian Society of Animal Production. **Malaysia**.
62. Yusuf, A. O., **Sowande, O. S.**, Aina, A. B. J., Sonibare, O. A. and Oni, A. O. 2018. Oxidative status of growing West African dwarf goat kids fed diets containing different nutrient density. ***Comparative Clinical Pathology***. 27:1 – 7. <https://doi.org/10.1007/s00580-0182640-6>. Published by Springer, London. **United Kingdom**.
63. Adekunle, E. O., Daramola, J. O., **Sowande, O. S.**, Abiona, J. A., and Abioja, M. O. 2018. Effects of apple and orange juices on quality of refrigerated goat semen. ***Journal of Agricultural Sciences***. 63(1):53 – 65. Published by University of Belgrade, Faculty of Agriculture. **Serbia**.

(C) Articles in Refereed Conference Proceedings:

64. Aina, A. B. J., **Sowande, O. S.**, Yusuf, A. O. and Sogbade, L. A. 1999. Replacement value of Palm Kernel Cake for Cotton Seed Cake on the performance of West African Dwarf goats. ***Proceedings of the 3rd Annual Conference of Animal Science Association of Nigeria (ASAN)***, Ologhobo, A. D., Bamgbose, A. M., Egbunike, G. N., Iyayi, E. A., Adewunmi, M. K. and Adeshinwa, A. O. K., (Eds.), 87— 90. Published by Animal Science Association of Nigeria.

65. Aina, A. B. J., Adebisi, I. A. and **Sowande, O. S.** 2001. Comparative effect of local potash, common salt, bone meal and ruminant mineral premix on the performance of West African Dwarf goats. ***Proceedings of the 35th Annual Conference of the Agricultural Society of Nigeria (ASN)***, Salako, F. K., Lagoke, S. T. O., Aina, A. B. J., Eruvbetine, D. and Dipeolu, A. O. (Eds.), 242-245. Published by Agricultural Society of Nigeria.
66. **Sowande, O. S.**, Akinleye, B. C., Ogundipe, B. A. and Idowu, O. M. O. 2002. Nutritive potentials of sawdust from mixed wood species. ***Proceedings of the 27th Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Aletor, V. A. and Onibi, G.E., (Eds.), 99 — 100. Published by Nigerian Society for Animal Production.
67. Idowu, O. M. O., Eruvbetine, D., Oduguwa, O.O. and **Sowande, O. S.** 2002. Effects of exogenous glucocorticoid (Dexamethasone) on growing pullet chickens. ***Proceedings of the 27th Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Aletor, V. A. and Onibi, G. E., (Eds.), 22— 24. Published by Nigerian Society for Animal Production.
68. **Sowande, O. S.**, Akapo, O. A. and Alo, O. E. 2004. Chemical composition and nutrient digestibility of wood ash treated sawdust of two particle sizes in West African Dwarf goats. ***Proceedings of the 29th Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Tukur, H. M., Hassan, W. A., Maigandi, S. A., Ipinjolu, J. K., Daneji, A. I., Baba, K. M. and Olorede, B. R. (Eds.), 359 — 363. Published by Nigerian Society for Animal Production.
69. **Sowande, O.S.**, Okunola, O. S., Fasae, O. A. and Aina, A. B. J. 2005. Comparative biochemical evaluation of mineral status of goats under two management systems. ***Proceedings of the 30th Annual Conference of the Nigerian Society for Animal Production(NSAP)***, Onah, D. N., Ani, A. O., Ugwu, S. O. C., Ezeokonkwo, R. C., Ihedioha, J. I. and Chah, K. F.(Eds.), 136—139. Published by Nigerian Society for Animal Production.
70. **Sowande, O. S.**, Ogunjobi, G. T. and Aina, A. B. J. 2008. Effect of feed trough shapes and methods of feeding on performance and blood biochemical constituents of West African dwarf goats. ***Proceedings of the 33th Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Adeyemi, O. A., Ogungbesan, A. M., Dada, A. O., Eniolorunda, O.O., Awojobi, H. A., Oke, D. B. and Agunbiade, J. A. (Eds.), 609 — 611. Published by Nigerian Society for Animal Production.
71. **Sowande, O. S.**, Adenuga, T. L. and Aina, A. B. J. 2008. Effect of feed trough shapes and feeding method on the performance and blood biochemical constituents of West African dwarf sheep. ***Proceedings of the 13th Annual Conference of Animal Science Association of Nigeria (ASAN)***, Bawa, G. S., Akpa, G. N., Jokthan, G. E., Kabir, M. and Abdu, S. B. (Eds.), 110— 112. Published by Animal Science Association of Nigeria.
72. Aina, A. B. J., **Sowande, O. S.**, Fasae, A. O., Oloko, O.O. and Oderinde, O.O. 2009. Traditional sheep and goat rearing and taboos in south-western Nigeria. ***Proceedings of the 14th Annual Conference of Animal Science Association of Nigeria (ASAN)***, Akinlade, J. A., Olayeni, T. B., Rafiu, T. A., Akinwunmi, A. O., Aderinola, O. A., Ojebiyi, O. O. and Odunsi, A. A.(Eds.), 575 — 577. Published by Animal Science Association of Nigeria.
73. Lamidi, A. A., Aina, A. B. J., **Sowande, O. S.** and Jolaosho, A. O. 2009. Assessment of *Panicum maximum* (Jacq), *Gliricidia sepium* (Jacq) and *Gmelina arborea* (Roxb)-based diets as all year round feed for West African dwarf goat. ***Proceedings of the 14th Annual Conference of***

Animal Science Association of Nigeria (ASAN), Akinlade, J. A., Olayeni, T. B., Rafiu, T.A., Akinwunmi, A. O., Aderinola, O. A., Ojebiyi, O. O. and Odunsi, A. A. (Eds.), 582 —584. Published by Animal Science Association of Nigeria.

74. Aina, A. B. J., Iposu, S.O., **Sowande, O. S.** and Jinadu, G. D. 2009. Incidence of foreign materials in the rumen of slaughtered ruminant animals. **Proceedings of the 14th Annual Conference of Animal Science Association of Nigeria (ASAN)**, Akinlade, J. A., Olayeni, T. B., Rafiu, T. A., Akinwunmi, A. O., Aderinola, O. A., Ojebiyi, O.O. and Odunsi, A. A. (Eds.), 626 — 628. Published by Animal Science Association of Nigeria.
75. Lamidi, A. A., Aina, A. B. J. and **Sowande, O. S.** 2010. Nutrient digestibility and nitrogen balance in West African dwarf goats fed blended diets for dry season. **Proceedings of the 34th Annual Conference of the Nigerian Society for Animal Production (NSAP)**, Babayemi, O.J., Abu, O. A. and Ewuola, E. O. (Eds.), 499 — 501. Published by Nigerian Society for Animal Production.
76. Oni, A. O., Arigbede, O. M., **Sowande, O. S.**, Anele, U. V., Aderinboye, R. V., Yusuf, K.O., Onwuka, C. F. I. and Onifade, O. S. 2010. Haematotological and serum biochemical parameters of West African dwarf goats fed dried cassava leaves based concentrate diets. **Proceedings of the 14th Annual Conference of Animal Science Association of Nigeria (ASAN)**, O. J. Ifut, U. A. Inyang, I. A. Akpan and I. E. Ebenso (Eds.), 213 — 216. Published by Animal Science Association of Nigeria.
77. Okeniyi, F. A., Aina, A. B. J., Onwuka, C. F. I. and **Sowande, O. S.** 2010. Nutrient digestibility of urea-maize stover based diets as dry season feed in West African dwarf goats. **Proceedings of the 14th Annual Conference of Animal Science Association of Nigeria (ASAN)**, O. J. Ifut, U. A. Inyang, I. A. Akpan and I. E. Ebenso (Eds.), 663 — 665. Published by Animal Science Association of Nigeria.
78. Aina, A. B. J., Adebisi, I. A., Adu, I. F., Alegbeleye, W. O. and **Sowande, O. S.** 2010. Non-mineral composition and digestibility study of guinea grass (*Panicum maximum* Jacq) raised on the soil fertilized with organic or inorganic fertilizers using West African dwarf sheep. **Proceedings of the 28th and 29th Annual Conference of Ghana Animal Science Association (GASA)**, B. Boa-Amponsem, F. V. Obese, P. Aboe, V. A. Botchway and S. A. Abresi (Eds.), 141 - 153. Published by Ghana Animal Science Association. **(Ghana)**
79. Aina, A. B. J., Ayano, R. T., Adu, I. F., Arigbede, O. M. and **Sowande, O. S.** 2010. Mineral concentration and digestibility study of guinea grass (*Panicum maximum* Jacq) raised with animal manures and NPK fertilizer using West African dwarf sheep. **Proceedings of the 28th and 29th Annual Conference of Ghana Animal Science Association (GASA)**, B. Boa-Amponsem, F. V. Obese, P. Aboe, V. A. Botchway and S. A. Abresi (Eds.), 141 — 153. Published by Ghana Animal Science Association. **(Ghana)**
80. Oni, A. O., Arigbede, O. M., **Sowande, O. S.**, Oni, O. O., Anele, U. Y., Areegbe, A. O., Aderinboye, R. Y., Yusuf, K. O. and Onwuka, C. F. I. 2012. Effects of addition of molasses and caged layer waste on the nutrient profile of fermented cassava leaves. **Proceedings of the 17th Annual Conference of Animal Science Association of Nigeria (ASAN)**, G. N. Akpa, F. A. S. Dairo, G. S. Bawa, I. P. Solomon, K. U. Amaefuele, A. A. Odunsi and A. O. Ladokun(Eds.), 615 — 618. Published by Animal Science Association of Nigeria.

81. Aina, A. B. J., Odunlami, J. A., **Sowande, O. S.** and Onwuka, C. F. I. 2012. Performance and growth pattern of West African dwarf lambs and kids on milk supplementation from birth to weaning. ***Proceedings of the 17th Annual Conference of Animal Science Association of Nigeria (ASAN)***, G. N. Akpa, F. A. S. Dairo, G. S. Bawa, I. P. Solomon, K. U. Amaefuele, A. A. Odunsi and A. O. Ladokun (Eds.), 626 — 629. Published by Animal Science Association of Nigeria.
82. Daramola, J. O., Abiona, J. A., Smith O. F., Isah, O. A., **Sowande, O. S.**, Olaniyi, M. O. and Olanite, J. A. 2014. Effect of *Mucuna pruriens* on spermatograms of West African dwarf bucks. ***Proceedings of the 39th Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Abdullah, A. R., Tayo, G. O., Okubanjo, A. O. and Akinsoyinu, O. A. (Eds.), 87 — 90. Published by Nigerian Society for Animal Production.
83. Sodipe, O. G., **Sowande, O. S.**, Abioja, M. O., Adeleye, O. O. and Osho, K. O. 2016. Influence of water restriction on the haematological parameters of West African dwarf bucks. ***Proceedings of the 41st Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Oluwatosin, O. O., Sowande, O. S., Olowofeso, O., Egbeyale, L. T., Adeleye, O. O., Njoku, C. P., Osofowora, A. O. and Sanda, A. J. (Eds.), 142 — 144. Published by Nigerian Society for Animal Production.
84. Alagbe, A. R., Egbeyale, L. T., Sogunle, O. M., Jegede, A. V., Adeleye, O. O., **Sowande, O. S.** and Edwards, S. A. 2016. Reproductive performance of two breeds of rabbit does fed diet containing algal biomass. ***Proceedings of the 41st Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Oluwatosin, O. O., Sowande, O. S., Olowofeso, O., Egbeyale, L. T., Adeleye, O. O., Njoku, C. P., Osofowora, A. O. and Sanda, A. J. (Eds.), 343 — 346. Published by Nigerian Society for Animal Production.
85. Oderinwale, O. A., Oluwatosin, B. O., **Sowande, O. S.** and Bemji, M. N. 2016. Effects of concentrate diets supplementation on some pregnancy variables and weight of kids of Kalahari Red does grazed on *Chloris gayana*. ***Proceedings of the 41st Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Oluwatosin, O. O., Sowande, O. S., Olowofeso, O., Egbeyale, L. T., Adeleye, O. O., Njoku, C. P., Osofowora, A. O. and Sanda, A. J. (Eds.), 572 — 576. Published by Nigerian Society for Animal Production.
86. Bamisile, K. K., Bemji, M. N., Wheto, M., **Sowande, O. S.**, Omotosho, B. O., James, I. J., Umejiesi, S. I., Lawal, A. M., Oluwatosin, B. O. and Okwuelum, N. 2016. Comparative study of the body weights at birth, weaning and post-weaning in Kalahari Red and West African dwarf goats. ***Proceedings of the 41st Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Oluwatosin, O. O., Sowande, O. S., Olowofeso, O., Egbeyale, L. T., Adeleye, O. O., Njoku, C. P., Osofowora, A. O. and Sanda, A. J. (Eds.), 828 — 831. Published by Nigerian Society for Animal Production.
87. Saka, A. A., **Sowande, O. S.**, Ogunleke, F. O., Ajayi, F. T., Adedeji, O. Y., Adekunjo, R. K., Adekanbi, O. A., Ogunfolabo, L. A. and Okuneye, O. J. 2016. Performance characteristics and serum biochemical indices of West African dwarf goats fed malted sorghum sprout mixed with pineapple waste. ***Proceedings of the 41st Annual Conference of the Nigerian Society for Animal Production (NSAP)***, Oluwatosin, O. O., Sowande, O. S., Olowofeso, O., Egbeyale, L. T., Adeleye, O. O., Njoku, C. P., Osofowora, A. O. and Sanda, A. J. (Eds.), 889 — 892. Published by Nigerian Society for Animal Production.

(C) Research Focus and Contribution to Knowledge

Research focus:

My research is focused essentially on small ruminant production under extensive (Traditional), semi-intensive and intensive management systems with special emphasis on:

- a. Mineral supplementation and status in West African dwarf (WAD) sheep and goats.
- b. Dry season feeding and concentrate supplementation strategies in WAD sheep and goats.
- c. Regression models for live weight estimation in WAD sheep and goats.

Contribution to knowledge:

a. Mineral Supplementation and status in West African dwarf (WAD) sheep and goats

Manure type and seasons were found to influence micro-mineral contents of grasses particularly *Panicum maximum* (28). Utilization of Calcium (Ca), Phosphorus (P) and Magnesium (Mg) by sheep declined with maturity of sown grasses despite application of organic and inorganic fertilizers (51). Blood mineral status was used as a basis for confirming the adequacy of these minerals in sheep and goat grazing natural pastures in both wet and dry seasons and under extensive and semi-intensive systems (11 and 42). It was established that Ca, P, Mg and Na supplementation in the diets of sheep and goats are necessary irrespective of management systems. Two Mg salts (sulphate and nitrate) were tested as supplements in the diet of WAD goats (1 and 2) and magnesium sulphate at 1.5% of diet induced the best performance. Other mineral sources – local potash, common salt, bone meal and ruminant mineral premix (40% egg shell, 40% bone meal and 20% common salt) were tested in WAD goats to meet the mineral requirements and ruminant mineral premix provoked the best performance (38). Wood ash was also found to be a useful mineral source in sheep and goat (39 and 41) and incorporated into the diet of sheep with positive effect on growth performance (13 and 14).

b. Dry season feeding and concentrate supplementation strategies in WAD sheep and goats

Small ruminant production systems rely mostly on sown or natural pastures and these are not usually available in the dry season. The effect is a pronounced weight loss in the dry season. Locally available feedstuffs were used to ameliorate dry season feeding problems. Preserved elephant grass, layer droppings, cassava peels and wood ash combined at 35%, 35%, 28% and 2%, respectively induced the best performance in WAD sheep (13 and 14), 60% maize stover, 10% urea and 30% concentrate (50), and 30% *Gliricidia* + 70% concentrate (46) induced the best performance in WAD goats. Supplementing *Newbouldia laevis* with *Panicum maximum* had no adverse effect on the blood profile of the WAD goats although some of the blood parameters differ significantly they were within the normal range for normal healthy goats (26). Furthermore, inclusion of dried cassava leaves in the diets of WAD goats had no deleterious effects on the haematological and serum biochemical parameters of WAD goats and could therefore be included in ruminant diets up to 60%. (29). Other feed materials assessed were *Tephrosia*, *Stylosanthes*, *Enterolobium*, *Moringa*, *Pterocarpus*, *Newbouldia laevis*, Baobab bark, dry cassava leaf, treated sawdust and bovine blood rumen content (4, 5, 8, 17, 27, 39, 41 and 48) all of which showed great potentials for solving dry season feeding problem.

In addition, the effects of molasses and storage periods on the chemical composition, microbial and fermentation characteristics of silage produced from guinea grass and cassava leaves mixture was studied as a means of solving dry season feeding challenges. Ensiling mixture of guinea grass and cassava leaves with molasses increased lactic acid and suppressed the production of acetic and butyric acids with drastic reduction in microbial load (32) The effects of different additives on the fermentation quality of ensiled cassava leaves and its effects on the ruminal fluid parameters was also studied in WAD dwarf goats. It was found out that ensiling cassava leaves with 5% molasses and caged layer waste improved the silage conditions and the ruminal fluid parameters of WAD goats. (35)

Furthermore, grasses alone cannot meet the nutrient requirements of sheep and goats. Concentrate supplementation strategies were therefore designed ensure that these animals meet their nutrient requirements. Soya bean meal or Palm kernel cake (PKC) was found to be adequate as a single protein supplement in sheep feeding to reduce cost of concentrate supplementation (10) while 40% PKC was found to be more beneficial in compounding concentrate supplement for WAD goats (3 and 37) under intensive system. West African dwarf goats grazing natural pasture performed better when mixed concentrate supplementation was done once (after grazing) or twice (before and after grazing) although cost of concentrate per weight gain was lower when supplementation was done after grazing (9). In WAD sheep, quality of concentrate (7) increased total dry matter intake (DMI) such that those exposed to diet of high quality spend more time on feeding (minutes per meal) with lower rate of feeding (g DMI/minute). Sheep and goats offered feed in rectangular feed trough tend to waste feed compared to when offered in square feed trough. Offering feed in square feed trough reduced feed consumption, improved feed utilization and cost of feeding in WAD sheep and goat production (43 and 44).

c. Regression models for live weight estimation in WAD sheep and goats

A large proportion of WAD sheep and goat as well as cattle are reared under extensive management system for meat production. Selection, feeding requirement, health management and decision on selling price are based on live weight. Regression models for estimating live weight from body measurements in three breeds of cattle, WAD sheep and goats were obtained with allometric models giving higher reliability (12, 15, 21 and 31).

10. MAJOR CONFERENCES ATTENDED WITH PAPERS READ

- i. Thirty ninth annual conference of the Nigerian Society for Animal Production (NSAP) at Babcock University, Ilishan Remo to present a paper on effect of *Mucuna pruriens* on spermatograms of West African dwarf bucks. March, 2014.
- ii. Seventeenth annual conference of Animal Science Association of Nigeria (ASAN) at Abuta to present a paper on performance and growth pattern of West African dwarf lambs and kids on milk supplementation from birth to weaning. September, 2012.
- iii. Fourteenth annual conference of Animal Science Association of Nigeria (ASAN) at Ladoko Akintola University of Technology, Akure to present a paper on traditional sheep and goat rearing and taboos in south-western Nigeria. September, 2009.

- iv. Thirty third annual conference of the Nigerian Society for Animal Production (NSAP) at Olabisi Onabanjo University, Ago Iwoye to present a paper on effect of feed trough shapes and methods of feeding on performance and blood biochemical constituents of West African dwarf goats. March, 2008.
- v. Thirtieth annual conference of the Nigerian Society for Animal Production (NSAP) at University of Nigeria, Nsukka to present a paper on comparative biochemical evaluation of mineral status of goats under two management systems. March, 2005.
- vi. Twenty ninth annual conference of the Nigerian Society for Animal Production (NSAP) at Usmanu Danfodiyo University, Sokoto to present a paper on chemical composition and nutrient digestibility of wood ash treated sawdust of two particle sizes in West African Dwarf goats. March, 2004.
- vii. Twenty seventh annual conference of the Nigerian Society for Animal Production (NSAP) at Federal University of Technology, Akure to present a paper on nutritive potentials of sawdust from mixed wood species. March, 2002.
- viii. Thirty fifth annual conference of the Agricultural Society of Nigeria (ASN) at University of Agriculture, Abeokuta to present a paper on comparative effect of local potash, common salt, bone meal and ruminant mineral premix on the performance of West African Dwarf goats. September, 2001.
- ix. Third annual conference of Animal Science Association of Nigeria (ASAN) at I. I. T. A. Ibadan to present a paper on replacement value of palm Kernel cake for cotton seedcake on the performance of West African Dwarf goats. September, 1999.

11. INFORMATION ON FELLOWSHIP, MASTERS PROJECT AND PHD THESIS SUPERVISED

a) Fellowship/Scholarship/Grants:

- i. A. G. Leventis (Egba) scholarship for postgraduate students: 1999.
- ii. A. G. Leventis (Egba) scholarship for postgraduate students: 2001 — 2003.
- iii. West African Network on Organic Agriculture Research and Training (EU Sponsored) staff exchange/mobility capacity building programme. Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. November 16 to December 7, 2009.
- iv. 2010 research grant by Institute of Food Security, Environmental Resources and Agricultural Research to study "Efficacy of *Newbouldia laevis* Extract and Nutrient Density on Gastrointestinal Nematode in Sheep Managed Semi-Intensively"

b) Postgraduate Student Supervision:

S/N	Name of Student	Title of Thesis	Year of Commencement	Level of Supervision	Status
1.	Ayo-Ajasa, O.Y.	Effect of seasonal variations and housing systems on the performance and linear body measurement of rabbits over two generations.	2006/2007 (PhD)	Co-supervisor	Completed (2011)
2.	Yusuf, A. O.	Effect of <i>Newbouldia laevis</i> extract and nutrient density on performance and gastrointestinal nematode in semi-intensively managed WAD	2008/2009 (M. Agric)	Major supervisor	Completed (2011)

		rams.			
3.	Omotoso, O. Y.	Performance and carcass evaluation of growing rabbit fed diet containing varying levels of xylanase enzyme with leaves of <i>Gliricidia sepium</i> as basal diet.	2008/2009 (M. Agric)	Co-supervisor	Completed (2011)
4.	Ajayi, O. O.	Polymorphism identification in the tenascin-XB gene and its effects on morpho-structural and physiological indices in Nigerian sheep	2008/2009 (M. Agric)	Co-supervisor	Completed (2011)
5.	Ajagbe, O. O.	Effect of feed quality restriction and realimentation on the performance of growing WAD sheep	2006/2007 (M. Agric)	Major supervisor	Completed (2010)
6.	Olayode, B. A. A.	Effect of feed quality restriction on the changes in body dimensions and carcass characteristics of WAD sheep	2006/2007 (M. Agric)	Major supervisor	Completed (2010)
7.	Ayankoso, M. T.	Effect of protein-energy densities on performance, haematological and gastro-intestinal parasite status of semi-intensively managed sheep.	2007/2008 (M. Agric)	Major supervisor	Completed (2010)
8.	Adeyolanu, O. J.	Performance characteristics of two strains of broiler chickens under intensive and semi-intensive management systems.	2007/2008 (M. Agric)	Major supervisor	Completed (2010)
9	Adedeji, A. A.	Estimation of live weight from linear body measurements of three African breeds of cattle under extensive management systems.	2006/2007 (M. Agric)	Co-supervisor	Completed (2010)
10.	Alamu, O.	Effect of age-in-lay of broiler	2007/2008	Co-	Completed

		breeders on egg quality, hatchability and post-hatch performance of chicks.	(M. Agric)	supervisor	(2010)
11.	Okunmuyide, O. T.	Utilization of Copper II Tetraoxosulphate VI by broilers fed organic finisher diet.	2006/2007 (M. Agric)	Co-supervisor	Completed (2010)
12.	Lamidi, A. A.	Utilization of <i>Panicum maximum</i> (Jacq), <i>Gliricidia sepium</i> (Jacq) and <i>Gmelina arborea</i> (Roxb) supplemented as dry season feeds for WAD goats.	2006/2007 (PhD)	Co-supervisor	Completed (2009)
13.	Okeniyi, F. A.	Performance evaluation and haematological parameters of the WAD goat fed urea - maize stover based diet.	2001/2002 (M. Agric)	Co-supervisor	Completed (2009)
14.	Ogunsanu, S. O.	Invitro gas production and ethanolic/methanolic extract characteristics of four multipurpose tree seeds.	2001/2002 (M. Agric)	Co-supervisor	Completed (2009)
15.	Okwelum, N	Prevalence of trypanosome infection in trade cattle at slaughter in Lafenwa abattoir, Abeokuta, Nigeria.	2006/2007 (M. Agric)	Co-supervisor	Completed (2009)
16.	Oluboyede, T. A.	Effect of concentrate supplement types on feed intake and performance of WAD sheep fed <i>Panicum maximum</i> as basal diet.	2005/2006 (PGD)	Sole supervisor	Completed (2007)
17.	Dele, P. A.	Effect of manure types and harvesting time on the yield and nutritive quality of three forage grasses with their hay and silage.	2008/2009 (PhD)	Co-supervisor	completed (2012)
18.	Ogunlakin, O.	Genetic and non-genetic factors affecting live measurements, haematological, biochemical	2010/2011 (PhD)	Co-supervisor	On-going (2014)

		and immunological parameters and heat tolerant traits in Nigerian breeds of goat.			
19.	Olayode, B. A. A.	Effect of feed quality restriction on pregnancy, litter size and postpartum performance in WAD goat.	2010/2011 (PhD)	Major supervisor	On-going (2014)
20.	Yusuf, A. O.	Effect of management systems, seasons and nutrient density on oxidative stress in WAD goats.	2011/2012 (PhD)	Major supervisor	On-going (2014)
21.	Ademokoya, A. J	Response of intensively managed West African dwarf goats to dietary inclusion of <i>Newbouldia laevis</i> (African border tree) leaf meal.	2011/2012 (M. Agric)	Major supervisor	Completed (2014)
22.	Ajanaku, O. O.	Prevalence of gastrointestinal parasites in sheep and goats in selected local government areas in Ogun State during wet and dry seasons.	2011/2012 (M. Agric)	Major supervisor	On-going (2014)
23.	Adekunle, E. O.	Comparative effects of natural antioxidants on WAD buck spermatozoa viability during cold storage.	2011/2012 (M. Agric)	Co-supervisor	Completed (2014)
24.	Bamisile, O. F.	Study on genetic differences and combining power of discrimination among Nigerian chicken populations using microsatellite markers.	2011/2012 (M. Agric)	Co-supervisor	On-going (2014)
25.	Oderinwale, O. A.	Reproductive performance of Kalahari red goats fed high and low protein diets in South Western Nigeria.	2011/2012 (M. Agric)	Co-supervisor	Completed (2014)
26.	Bankole-Oye, T. G.	Contribution of goat products to livelihood of rural women farmers in	2010/2011 (M. Agric.)	Co-supervisor	Completed (2014)

		Ogun state.			
27.	Shitan, B. O.	Performance characteristics and blood profile of goats reared under two on-farm management systems.	2011/2012 (M. Agric.)	Co-supervisor	On-going (2014)
28.	Ogunmayowa, O.	Production and household consumption of rabbit meat in Edo State, Nigeria.	2011/2012 (M. Agric.)	Co-supervisor	On-going (2014)
29.	Saka, A. A.	Response of West African dwarf goats to raw and fermented malted sorghum sprout.	2011/2012 (M. Agric.)	Major	On-going (2014)
30.	Olaniyi, T. A.	Utilization of mineral nutrients from different sources for lactation and weaning in West African dwarf goats.	2011/2012 (PhD)	Co-supervisor	On-going (2015)
31.	Ajayi, O. O.	Computational identification of heat shock protein genes and analyses of skin transcriptome of geographically separated <i>Bos Indicus</i> and <i>Bos Taurus</i> cattle.	2011/2012 (PhD)	Co-supervisor	Completed (2014)
32.	Adetayo, A. O.	Response of sheep to cassava peels supplanted with varying levels of <i>Leucaena leucocephala</i>	2012/2013 (M. Agric.)	Co-supervisor	Ongoing (2014)
33.	Adekunle, E. O.	Effect of vitamin E supplement on cryopreservation of spermatozoa obtained from West African dwarf bucks.	2013/2014 (PhD)	Co-supervisor	Ongoing (2016)

12. EXTRA CURRICULAR ACTIVITIES

Watching movies, playing football and travelling

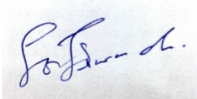
13. REFEREES

- a) Prof. A. B. J. Aina
Department of Animal Production and Health,
Federal University of Agriculture Abeokuta,
P. M. B. 2240, Abeokuta,
Nigeria.

- b) Prof. C. F. I. Onwuka
Department of Animal Nutrition,
Federal University of Agriculture Abeokuta,
P. M. B. 2240, Abeokuta,
Nigeria.

- c) Prof. Funmi Adebambo
Department of Animal Breeding and Genetics,
Federal University of Agriculture Abeokuta,
P. M. B. 2240, Abeokuta,
Nigeria.

Signature:



Date: March 13, 2018