

PROFILE OF PROFESSOR OLUWATOYIN ABIMBOLA BABALOLA

Brief biography

Prof Oluwatoyin Abimbola Babalola was born in Ilesha, Osun State. Her place of origin is Ekinrin-Adde, Ijumu Local Government Area, Kogi State. She started her education in Kaduna and Kogi States (primary school education) and then proceeded to Kwara State (Oyun Baptist High School Ijagbo) for her secondary School education (1976-1981). She attended University of Ilorin for her B.Sc (1981-1985) and M.Sc (1987-1988) degrees. She joined Ahmadu Bello University in 1990 as an Assistant Lecturer, where she also registered for PhD in Soil Science (1991-1997). Oluwatoyin Babalola transferred her service to Federal University of Agriculture, Abeokuta on 17th September 2001 as a Lecturer 1, she became a Professor of Soil Microbiology in October 2012. She lectures and supervises undergraduate and postgraduate students in Soil microbiology, Soil fertility and Environmental Soil Management. She has held some administrative positions, including 2 terms Head of department (2008-2010 and 2014-2018). She is chairman or member of many Departmental, College and University committees.

Passport photograph



Personal information:

Prof. Oluwatoyin Babalola has expertise in Soil Microbiology, Integrated soil fertility management, Environmental Soil Science, Bioremediation of contaminated soil and Soil management in organic crop production systems.

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Qualification:

- a. Primary School leaving Certificate (1976)
- b. West African School Leaving Certificate (1981)
- c. BSc. Microbiology (Hons) (1985)
- d. MSc. Microbiology (1989)
- e. PhD (Soil Science) (1997)

Membership of Professional Bodies:

- i. Botanical Society of Nigeria
- ii. Science Association of Nigeria
- iii. Soil Science Society of Nigeria
- iv. Soybean Association of Nigeria
- v. African Soil Science Society
- vi. Nigerian Association of Women Academician
- vii. Organic Agriculture in Tertiary Institutions in Nigeria (OAPTIN)
- viii. Nigeria Society of Microbiology
- ix. Third World Organization of Women in Science (TWOWS)
- x. International Society of Organic Agriculture Research
- xi. International Mycology Society (IMS)
- xii. Biochar Initiative of Nigeria
- xiii. Nigerian Institute of Soil Science

- f. Primary School leaving Certificate (1976)
- g. West African School Leaving Certificate (1981)
- h. BSc. Microbiology (Hons) (1985)
- i. MSc. Microbiology (1989)
- j. PhD (Soil Science) (1997)

The *Omo-atata* award received from my community, Ekinrin-Adde, Kogi State, for my contribution to the development of the community and being the first female Professor from the Town.

Research Conducted:

1. Composting and compost use in organic agriculture
2. Integrated soil management

3. Mycorrhizal fungi
4. Nitrogen fixation
5. Soil Bioremediation
6. Forest microbial ecology
7. Soil microbial ecology in agricultural systems

Conferences attended

a. International conferences

- i. Third All African Soil Science conference held in University of Ibadan from 19th – 26th August 1995.
- ii. International symposium on Balanced Nutrient Management Systems held in Cotonou, Republic of Benin between 9th – 12th October 2000
- iii. West African summit and on organic agriculture
- iv. International conference on mycorrhiza (ICOM 8) held in Northern Arizona University, Flagstaff, USA between 3rd and 8th August 2015.
- v. 1st International Conference on Biodynamic Agriculture held in Donarch, Switzerland between 3rd and 9th September 2018.

b. Local conferences

- i. Twenty fourth annual conference of Science Association of Nigeria
- ii. Seventh annual conference of Botanical Society of Nigeria
- iii. Twenty fifth annual conference of Science Association of Nigeria
- iv. Twenty third annual conference of Soil Science Society of Nigeria
- v. Twenty fourth annual conference of Soil Science Society of Nigeria
- vi. Twenty fifth annual conference of Soil Science Society of Nigeria
- vii. Twelfth annual conference of Nigerian Soybean Association
- viii. Twenty sixth annual conference of Soil Science Society of Nigeria.
- ix. Twenty ninth annual conference of Soil Science Society of Nigeria
- x. First conference on Organic agriculture in Nigeria (2005)
- xi. Annual conference of Microbiological Association of Nigeria (2005)
- xii. Second conference on Organic Agriculture in Nigeria (2006)
- xiii. First Organic regional conference (2008)
- xiv. Thirty third annual conference of Soil Science Society of Nigeria (2009)
- xv. Thirty fourth annual conference of Soil Science Society of Nigeria (2010)
- xvi. Thirty ninth annual conference of Weed Science Society of Nigeria (2011)
- xvii. Thirty fifth annual conference of Soil Science Society held in Addo Ekiti (2012)
- Xviii. Fortieth annual Conference of Soil Science Society held in IAR&T (2018)
- Xix. Forty- fourth annual conference of Soil Science Society held I Bowen University, Iwo (2021)

Publications

1. Noah Alabi Oyebamiji, Oluwatoyin Abimbola Babalola, David Olusegun Adelani (2022) Effect of mineralized nitrogen through decomposition of plant residues on uptake of maize (*Zea mays* L) in Sudan Savana ecological zone of Nigeria. *Journal of Biotechnology and Biodiversity* 10 (1) 94-101 <https://doi.org/10.20873/jbb.uft.cemaf.v10nl.oyebamiji>

2. Adigun M.O., Abiola I.O. and Babalola O.A. (2022) Effect of organic production of maize on soil microbial population and activities on alfisol in Abeokuta, Southwestern Nigeria. *Journal of Plant and Soil Science* 34(19): 81-90 85500 ISSN: 2320-7035/ DOI: <https://doi.org/10.9734/ijpss/2022/v34i1931092>
3. Okoro I.O., Babalola A. O., Adesodun J.K., Gbadebo A.M., Nwachukwu O.L (2022) Ecological risk assessment of heavy metals pollution in farm around mining site in Amagu-Enyigba, Ebonyi State Nigeria. *Nigerian Journal of Soil and Environment Research* 21: 87-93
4. Okoro, I.G. and Babalola, A.O (2022) Arbuscular mycorrhizal fungi diversity in Pb/Zn mining soil and root colonization as amended with biochar. *Journal of the science of Agriculture, food technology and the environment*. 1: 47-53
5. Okoro, I.G. and Babalola, A.O (2021) Arbuscular mycorrhizal fungi diversity in Pb/Zn mining soils and root colonization as amended with biochar. *Journal of the Science of Agriculture Food Technology and the Environment* (1) 2021, 47-53 <https://doi.org/10.36265.2021.jsafe.010109>
6. Komolafe A.F., Adejuyigbe C.O., **Babalola O.A.**, Soretire A.A. and Kayode C.O. (2021) Fertilizer values of compost as affected by plant materials and composting duration on maize (*Zea mays*) performance *Agroscience* 20 (1), 87-94. DOI: <https://dx.doi.org/10.431/as.v20i1.14>
7. Adebanke Olubodea, Oluwatoyin Babalolaa, Micheal Darea, Nurudeen Olatunbosun Adeyemib, Sunday Aderibigbeb, Chris Okonjic and Olalekan Sakariyawob (2020) Diversity of indigenous arbuscular mycorrhizal fungi in rhizosphere of rice (*Oryza sativa* L) in Southwest Nigeria. *Acta fytotechn zootechny* 23, 2020(2) 42-48
8. Oyebamiji Noah Alabi, **Babalola Oluwatoyin Abimbola**, Ogundijo Dayo Stephen (2020) Combined effect of organic and inorganic fertilizers on maize for sustainable food supply in semi-arid Nigeria. *Journal of Tropical Research and Sustainable Science*, 8: 40-46,
9. Ikwakonam G. Okoro, Abimbola O. Babalola and Benjamin C. Maranzu (2020) Influence of biochar on bio-accumulation of heavy metals in maize crop beside lead/zinc mining site in Ebonyi State. *Journal of Agriculture, Forestry & Environment* 2020, 4 124-140
10. **Oluwatoyin A. Babalola** (2019) Assessment of the contribution of microbial activities to tomato growth and yield under an organic production system. *Open Agriculture* 4: 661-675 (De Gutyer) <https://doi.org/10.1515/Opag-2019-0063>
11. Toyin Olowoboko, Jamiu Azeez, Olarenwaju Olujimi, **Oluwatoyin Babalola** (2020) Nitrogen mineralization kinetics in some Tropical Soil Amended with Ashed and unashed Animal Manures *Jordan Journal of Earth and Environmental Sciences* 10 (4): 204-214
12. Adigun M.O., **Babalola O.A.**, and Abiola I.O. (2019) Petroleum Hydrocarbon degradation by Indigenous bacteria Isolated from Contaminated Soils in Some Selected Local Government Areas of Ogun State *Crawford Journal of natural & Applied Sciences* 1: 38-45
13. Amujo B.T., Towolawi A.T., Adeofun C.O., Oguntoke, O., Babalola O.A., Ojekunle Z.O. (2019). Influences of Seasonal Variation on Soil Chemical Content in Selected Housing Estates, Ogun State. *African Journal of Agricultural Technology and Environment* Vol. 8(2): 24-38. E- ISSN 2346-7290
14. Toyin B. Olowoboko, Jamiu O. Azeez, Olanrewaju O. Olujimi, **Oluwatoyin A. Babalola** (2018) Availability and dynamics of organic carbon and nitrogen indices in some soils amended with animal manures and ashes. *International Journal of Recycling Organic Wastes in Agriculture*. <https://doi.org/10.1007/s40093-018-0215-9>

15. Amujo, B.T; Adeofun, C.O; Oguntoke, O; **Babalola, O.A**; Towolawi, A.T; Ojekunle, Z.O (2018) Seasonal Variations of pH and Heavy Metals Content in Soil of Selected Housing Estates in Ogun State, Nigeria J. Appl. Sci. Environ. Manage. Vol. 22 (9) 1403– 1408
16. Yusif S.A, Dare M.O, Babalola O.A, Popoola A.R, Sharif M.R and Habia M.Y (2018) The roles of Biochar and Arbuscular Mycorrhizal inoculation on selected soil biological properties and tomato performance. FUTY Journal of Environment 12 (2): 1-8
17. Toyin B. Olowoboko, Jamiu O. Azeez, Olanrewaju O. Olujimi & **Oluwatoyin A.** and Electrical Conductivity in Some Southwester Nigerian Soils. Communications in Soil Science and Plant Analysis. DOI: 10.1080/00103624.2018.1464184 Taylor & Francis.
18. Amujo B.T., Adeofun C.O., Oguntoke, O., Babalola O.A., Towolawi A.T., Ojekunle Z. O. (2018). Seasonal Variation of pH and Heavy Metal Content in Soil of Selected Housing Estates in Ogun State, Nigeria. *Journal of Applied Sciences and Environmental Management*. Vol. 22 (9) ISSN 1119-8362
19. **Babalola O.A**, Adigun M.O and Abiola I.A (2018) Effect of urea and compost amendments on soil microbial activities and chemical properties. Asian journal of Research in Crop Science 1(3): 1-7. DOI: 10.9734/AJRCS/2018/40798
20. **Babalola O.A**, Adigun M.O and Abiola I.O (2018) Variation in soil chemical and microbiological properties as result of yearly amendment with organic fertilizer. Asian journal of Research in Crop Science 1(1): 1-7. DOI: 10.9734/AJRCS/2018/40796
21. Adigun M.O, **Babalola O.A**, and Abiola I.O (2017) Influence of Bradyrhizobium Japonicum, mycorrhiza and poultry manure on nodulation, nitrogen uptake, growth and yield of soybean (*Glycin max L.*). Journal of Sciences and Multidisciplinary Research 9(2): 1-17
22. Yusif SA, **Babalola OA**, Popoola AR, Haruna S, Nabayi A (2017) Agronomic response of tomato to biochar application and arbuscular mycorrhiza (*Glomus mosseae*) inoculation. Journal of Agriculture, forestry and fisheries 16(1): 94-98 ISSN 1596-5317 Published by University of Benin.
23. M.O. Adigun and **O.A. Babalola** (2017) Influence of *Bradyrhizobium* and Mycorrhiza on Growth, Yield and Phosphorus Use Efficiency in Soybean under Manure application. Journal of Advances in Microbiology. 3(3) 1-11.
24. Oyebamiji N.A, Aduradola A.M and Babalola O.A (2017) Effect of organic and mineral fertilizer inputs on maize yield and soil exchangeable cations in Makera, Northwest, Nigeria. Forests and Forest Products Journal, 10:79-86
25. N.A. Oyebamiji, **O.A. Babalola** and A.M. Aduradola (2017) Decomposition and Nitrogen Release Patterns of *Parkia biglobosa* and *Albizia lebbeck* Leaves with Nitrogen Fertilizer for Maize Production in Sudan Savanna Alfisol of Nigeria. Journal of Tropical Forestry and Environment. Vol. 07, No 01 (2017) 54-64
26. Olalekan Sakariyawo, Mufutau Atayese, Kehinde Okeleye, **Abimbola Babalola**, Idowu Adegoke, Micheal Dare, Paul Soremi and Sunday Adigbo (2017) Yield and its attributes responses to draught tolerant upland Nerica rice to different treatments in rainforest transitory agroecology. Acta agriculturae Slovenica 109 (1) 15-27
27. A.F. Adekunle, C.O. Adejuyigbe, **O.A. Babalola** and I.O.O.Aiyelaagbe (2016) Chemical Properties and Nutrient Composition of Composted Cow dung as Affected by Duration of

- Composting and Bulking Plant Materials. Journal of Advances in Biology & Biotechnology 6(3): 1-7 Published by ScienceDomain International.
28. Oyebamiji, N.A., Aduradola, A.M., Oladoye, A.O. and Babalola, O.A. (2016) Influence and interaction of agroforestry trees leafy biomass with nitrogen fertilizer inclusion on maize yield under semi-arid conditions. *Nigerian Journal of Ecology* 15(2):11-18
 29. Oyebamiji, N.A, Aduradola, A.M and **Babalola, O.A.** (2016) Effect of *Albizia lebbbeck* (L.) Benth and *Parkia biglobosa* (Jacq) Benth leafy biomass with nitrogen fertilizer on soil chemical properties at maize harvest in semi-arid Nigeria. *African Journal of Agriculture, Technology and Environment* Vol. 5(1): 41-53
 30. M.O Adigun and **O.A Babalola** (2016) Dynamics of Nitrogen on Soybean field amended with poultry manure. *British Microbiology Research Journal* 16 (6) 1-10
 31. M.O Adigun and **O.A Babalola** (2016) Soil microbial activities in soybean rhizosphere inoculated with Bradyrhizobium and mycorrhizal fungi. *Journal of Agriculture and Ecology Research International. ScienceDomain* 9 (42) 1-12
 32. Popoola A, Ganiyu S, **Babalola O**, Ayo-John E, Fajinmi A, Kehinde I, Adedibu B and Adegbeye T (2014) Impact of soil amendments and weather factors on bacterial wilt and yield of two tomato cultivars in Abeokuta, Nigeria. *South African Journal of Plant and Soil*. Doi.org/10.1080/02571862.2014.966339 Published by Taylor & Francis.
 33. Adigun M.O and **Babalola O.A** (2013) Effects of pig dung and poultry manure with plant residues on the production of some leafy vegetables. *Science Journal of Agricultural Research and Management*. DOI: 10.7237/sjarm/210
 34. **Babalola O.A** and Adigun M.O. (2013) Effects of pig and poultry manure with plant residues on the production of some fruit vegetables. *International Multidisciplinary Research Journal* 3 (2): 32-35
 35. **Babalola, O.A.**, Adesodun, J.K., Olasantan, F.O and Adekunle, A.F. (2012) Responses of some soil biological, chemical and physical properties to short-term compost amendment *Int. J of Soil Sc.* 7 (1): 28-38, DOI: 10.3923/ijss.2012.28.38 Published by Academic Journals Inc., USA
 36. **Babalola O.A** (2012) Assessment of the remediative capacity of mycorrhizal fungi (*Glomus mosseae*) NPK and poultry manure in oil contaminated soil. *Nigeria Journal of Soil Science*, 22 (2). Published by Soil Science Society of Nigeria (SSSN). Available on line on <http://www.ajol.info/index.php/njss>
 37. A.R. Popoola, A.S Ganiyu, **O.A. Babalola** and E.I. Ayo-John (2011) Effects of tillage methods, varieties and compost amendments on bacterial leaf spot, leaf speck and fruit yield of two tomato varieties. *Nigerian Journal of Plant Protection* 25 (1) 127-138 Published by Nigerian Society for Plant protection (NSPP)
 38. **Babalola, O.A** and Adigun, M.O (2011) Effects of different sources of organic materials on compost and its use as soil amendment in okra cultivation. Accepted in *International Journal of Multidisciplinary Research*, Vol. iv, Nos 1 and 2, 1-7. Published by Postgraduate School, Olabisi Onabanjo University, Ago, Iwoye, Ogun State, Nigeria.
 39. Egberongbe H.O, Akintokun A.K, **Babalola O.A** and Bankole O.O (2010) The effect of *Glomus mossaea* and *Trichoderma harzianum* on proximate analysis of soybean (*Glycine max* (L) Merrill.) seed grown in sterilized and unsterilized soil. *Journal of Agricultural*

Extension and Rural Development 2 (4): 54-58. Published by Academic Journals. Available online <http://www.academicjournals.org/jaerd>

40. Egberongbe H.O, Bankole O.O, Akintokun A.K and **Babalola O.A** (2010) Influence of *Glomus mosseae* and *Trichoderma harzianum* on the nutrient status of soybean (*Glycine max* L Merr) grown in sterilized and unsterilized soil. *International Journal of Multidisciplinary Research* 1: 35-40. Published by Postgraduate School, Olabisi Onabanjo University, Ago, Iwoye, Ogun State, Nigeria.
41. Olla, N.O, Adetunji, M.O, **Babalola, O.A** and Elemo, K.A (2010) Agronomic Efficiency of NPK 20:10:10 fertilizer formulated from Ogun phosphate rock. *Nigerian J of Soil Science* 20 (1): 69-78. Published by Soil Science Society of Nigeria (SSSN). Available on line on <http://www.ajol.info/index.php/njss>
42. Isah K.M, Lagoke S. T. O., Phillip B.B, Adeniji A and **Babalola O.A** (2010) Evaluation of open pollinated maize varieties for Resistance/tolerance to *Striga hermonthica* Del. Benth. At Mokwa Southern Guinea savanna of Nigeria. *Journal of Agricultural Science and Environment* (ASSET) 10 (1) 10-17. Published by FUNAAB.
43. **Babalola, O.A.** and Adigun, M.O (2009) Effect of different sources of organic materials on compost and its use as soil amendment in tomato cultivation. Accepted in *International Journal of Scientific Report and Development Issues* Vol 2 No. 1. Published by Department of Agricultural Economics and Extension, University of Calabar, Nigeria.
44. Philip, B.B, Aiyelaagbe, I.O.O and **O.A Babalola** (2009) Analysis of costs and returns to vegetable production in Abeokuta, Nigeria. *African Journal of Agricultural research*, Vol 4 (8) Published by Academic Journals. Available online at <http://www.academicjournals.org/AJAR>.
45. **Babalola, O.A.**, Atayese, O.M and Akintunde, I.B (2009). Influence of two *Glomus* species on the fertilizer efficiency of Sokoto phosphate rock in soybean production and the residual soil. *Nigerian Agricultural Journal*. 40 No 1: 150-160. Published by Agricultural Society of Nigeria. Available online at <http://www.inasp.info/ajol/journal.html>
46. **Babalola, O.A.** (2009) The efficiency of microbial inoculated phosphate rocks on maize production in an Alfisol. *Nigerian Journal of Soil Science* 19: 51-59. Published by Soil Science Society of Nigeria (SSSN). Available online on <http://www.ajol.info/index.php/njss>
47. **Babalola, O.A.**, Lagoke, S.T.O. and O.N Sulaiman (2009). Interaction between rates of phosphorus application and flat or ridge planting in groundnut (*Arachis hypogea* L) varieties. *Nigerian Journal of Soil Science* 19: 60-69. Published by Soil Science Society of Nigeria (SSSN). Available on line on <http://www.ajol.info/index.php/njss>
48. **Babalola O.A**, Atayese, M. O. and Soyoye, T (2009) Influence of *Bradyrhizobium* and two *Glomus* species on growth and yield of soybean. *Journal of Agricultural Science and Environment* 9 (2): 79-95. Published by Federal University of Agriculture, Abeokuta.
49. Olasantan, F.O. and **Babalola, O.A.** (2007) Effects of intercropping and melon sowing date on crop growth, soil micro-environment and rhizosphere fungi and bacterial

- populations of maize and cassava *Biological Agriculture and Horticulture*, 24: 415-436, 0144-8765/07\$10. Published by A B Academic Publishers, Great Britain.
50. Akintokun, A.K., Akande, G.A., Akintokun, P.O., Popoola, T.O.S. and **Babalola, O. A.** (2007). Solubilization of Insoluble Phosphate by organic acid-producing fungi isolated from Nigerian soil. *Int. Journal of Soil Science* 2 (4): 301-307, ISSN 1816-4978. Published by Academic Journal Inc, USA.
 51. **Babalola, O.A.** and Amapu, I.Y. (2006). Response of some cowpea genotypes to different rates of phosphorus in Samaru. *Nigerian Journal of soil Science* 16: 77-83. Published by Soil Science Society of Nigeria (SSSN). Available on line on <http://www.ajol.info/index.php/njss>
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 53. **Babalola, O.A.** (2005) Microbial enhancement of rock phosphate utilization in maize and Soybean production in the northern guinea ecological zone of Nigeria. *Samaru Journal Agric. Res.* 21: 16-29. Published by Institute for Agricultural Research, Samaru, Ahmadu Bello University, Zaria. Available online at <http://www4.fao.org/cgi-bin/faobib.exe?>
 54. A.C. Odunze, S.A Tarawali, N.C. de Haan, E.N.O. Iwuafor, P.D. Katung, G.E. Akoueguon, A.F. Amadji, R. Schultze-Kraft, T.K. Atala, A. Adamu, **A.O. Babalola**, J.O. Ogunwole, A. Alimi, S.U. Ewansiha and S.A. Adediran. (2004) Grain legumes for soil productivity improvement in the northern guinea savanna of Nigeria. *Journal of Food, Agriculture and Environment*. Vol. 2 (2). 218-226. Published by WFL Publisher, Science and Technology, Finland, UK. Available online at <http://www.isfae.org/scientificjournal.php>
 55. Raji, B.A., Gimba, B.W. and **Babalola, O.A.** (2003) Total and exchangeable bases in soils of Nigerian savanna. *Journal of Arid Agriculture*. Vol. 14: 111-120. Published by Faculty of Agriculture, University of Maiduguri, Nigeria. Available online at mautech.edu.ng/index.php?
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