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Research Interests /Expertise

Dr. Bisikwa is an Agronomist/Weed Scientist who has been engaged in research, training, outreach and community-based research activities focusing on the management of crop production constraints using participatory approaches. She has been involved in several research projects in collaboration with partners from other countries including USA and UK, and co-supervised graduate students/published scientific papers in peer reviewed Journals. As a Team Leader on various research projects, she has been involved in participatory development and dissemination of appropriate agronomic packages under diverse farming systems in Uganda. She has trained both undergraduate and postgraduate students in aspects of Agronomy, Weed Management, and Farming Systems/Cropping Systems using case studies and hands-on approaches. Dr. Bisikwa has also been recognized as a Distinguished Career Mentor for dedication and commitment to Excellence in Mentoring, African Women in Agricultural Research and Development (AWARD) under CGIAR Gender & Diversity Program. Mentorship and Gender-responsive approaches have been key areas of her work experience since 2005 under Gender and Diversity Program funded by the Rockefeller Foundation and AWARD Program funded by the Gates Foundation. Through this experience, mentoring both young female and male Agricultural scientists has become her lifelong passion because of its multiplier effect and impact. Currently, Dr. Bisikwa is one of the Trainers under GREAT (Gender-responsive Researchers Equipped for Agricultural Transformation) Project, implemented by Makerere University, Uganda in partnership with Cornell University in the USA, where Agricultural researchers around the world are equipped with gender-responsive tools that aid Research Design and Implementation along the crop value chain in order to benefit both men and women farmers and other stakeholders. She has recently trained Agricultural Researchers in Sub-Saharan Africa and South-East Asia in Gender-responsive, climate smart agriculture and resilient Seed Systems.

Professional Training and Experience

2005: PhD (Applied Plant Sciences), University of Minnesota, USA
2001: M.Sc. (Agronomy/Weed Science), University of Minnesota, USA
1997: M.Sc. (Crop Science), Makerere University, Kampala, Uganda
1995: B.Sc. (Agriculture), Makerere University, Kampala, Uganda

Awards or special recognitions received

2008-2010: Recognized for dedication and commitment to excellence in mentoring (Career Mentor), African Women in Agricultural Research and Development (AWARD), CGIAR Gender & Diversity Program, Kenya
2008: Carnegie Corporation of New York Post-Doctoral Research Grant, Directorate of Research and Graduate Training, Makerere University, Uganda
2005-2006: The Rockefeller/Gender and Diversity mentoring Fellowship, Kenya
2003: Heug-Harrison mentoring Fellowship, St. Paul, Minnesota, USA
2001-2002: Honorary Award for academic excellence, Honors Society of Agriculture, University of Minnesota Chapter, USA

1999: AURI grant - Agricultural Utilization Research Institute (AURI) project, USA
1997-2004: Project AgGrad Scholarship, USA
1998-2004: Research Assistantship, University of Minnesota, St. Paul, USA
1995: Scholarship by World Bank (ARTP project), Makerere University, Uganda

Research Projects

2018-present: Trainer, Gender-responsive Researchers Equipped for Agricultural Transformation (GREAT): Cornell-Makerere Certificate Program
2012-2017: Team Leader/Agronomist, BBSRC funded project on Screening and understanding resistance and virulence of parasitic weed, *Striga hermonthica* in upland rice production in Eastern Uganda
2009-2014: Team Leader/Agronomist, The McKnight Foundation Funded project on Participatory Development of High Yielding and Pest Resistant Farmer-preferred Cowpea varieties in Uganda
2009-2013: Collaborator/Agronomist, The McKnight Foundation Funded project on Promoting production and utilization of Grain Amaranth for improved nutrition and health in Uganda
2010-2012: Team Leader/Agronomist, RUFORUM Funded Project on Participatory Management of *Striga* in Cereal-Based Cropping Systems in Eastern Uganda
2009-2011: Team Leader/Agronomist, Carnegie Corporation of New York Funded Project on Production of High Value Peanut-Based Product from Groundnut varieties with low Aflatoxin levels

Professional Membership and Activities

- Association of Uganda Professional Women in Agriculture and Environment (AUPWAE)
- Member, Association of Uganda Professional Agriculturists (ASUPA)
- Member, African Crop Science Society (ACSS)
- Professional Women's Network (PULSE-NETWORK), Uganda
- Career Mentor, African Women in Agricultural Research and Development (AWARD), Gender and Diversity Program
- Agronomist, Gender-Responsive Researchers Equipped for Agricultural Transformation (GREAT): Cornell-Makerere Certificate program
- Irrigation Agronomist Consultant on Andibo Dam Micro-Irrigation Program under Ministry of Water and Environment, Government of Uganda
- Uganda Technical working Team, Striga Eradication Program implemented by Kilimo Trust
- Member, Weed Science Society of America)

Community based work

- Member, The Vice Chancellor's Standing Rooster of 100 to investigate sexual harassment, Makerere University since 2019.
- Parenting Mentor, Mothers of Sons Uganda under Transform Nations Initiative, a community-based effort to raise boys into responsible men of tomorrow.
- Sponsor of an orphaned girl-child under the Watoto Childrens' Ministries (Watoto Church) since 2015
- Member, Professional Women's Network (PULSE-Network), Uganda. PULSE-Network an association that empowers/mentors the girl child and does

community outreach and empowerment including career guidance/reproductive hygiene in secondary schools.

- Co-Sponsor of two underprivileged girls who can't raise tuition fees to complete their academic studies. This education fund is administered by Professional Women's Network (PULSE-Network), Uganda, to which I have been a member since 2006
- Board Member/Advisor, HIV Free Generation Makerere University Association, since 2010
- Volunteer, Living Hope Ministries (Watoto Neighborhood) caring for women and children that have been affected by HIV/AIDS, Watoto Church, Kampala, Uganda since 2008
- Organizing Secretary, School of Agricultural Sciences, Staff Christian Fellowship, 2008-2012
- Member, Community Development Scheme (NHELTA), Naalya Estates, Kampala, Uganda, 2006-2016
- Volunteer, Invasive Plant removal program, St. Paul, Minnesota, (neighborhood project), 2003-2005
- Volunteer, Simpson's Food shelter, Minneapolis, MN, 2000.
- Organizing Secretary, Faculty Christian Fellowship, 1993-1994.
- Member, Mulago Hospital Evangelist Team, Makerere University Christian Union, 1993-1997.
- Hall representative, Mary Stuart Hall, Makerere University, 1993-1994.
- Care Group Leader, Mary Stuart Fellowship Makerere Christian Union, 1993-1994.
- Associate Member, Fellowship of Christian Unions (FOCUS Ministries), 1991-1997.
- Member, Friends of the Elderly, Gayaza High School, 1988-1990

Publications

1. **J. Bisikwa**, P. Nampala, D.L. Nsibo, N. Kwikiriza, C. Bukenya, M.H. Otim, I. Kaping, F.M. Kabuye and J. Felix (2022). Assessment of *Striga hermonthica* infestation and effectiveness of current management strategies in maize-based cropping systems in eastern Uganda. African Crop Science Journal, Vol. 30, No. 4, pp. 525 – 538. www.ajol.info/ and www.bioline.org.br/cs
DOI: <https://dx.doi.org/10.4314/acsj.v30i4.10>. ISSN 1021-9730/2022.
2. Ssendikadiwa, J.K., **Bisikwa, J.** and Ssebuliba, J.M. (2021). Yield performance and stability of elite groundnut varieties in multi-location experiments in central Uganda - A short communication. Makerere University Journal of Agricultural and Environmental Sciences Vol. 10 (2). pp. 163 - 177, 2021 Printed in Uganda. All rights reserved ©Makerere University 2021 ISSN 1563-3721
3. Lado Aquilino, A. Pariyo, Y. Baguma, R. Edema, P. Gibson and **J. Bisikwa** (2021). Genotypes by environment effect on flowering and seed set in cassava, *Manihot esculenta* Crantz in Uganda. Journal of Food, Nutrition and Agriculture 2021, 4: 26-37 <https://doi.org/10.21839/jfna.2021.v4.7222>
4. Joseph Ekwangu, John Steven Tenywa, **Jenipher Bisikwa**, Charles Andiku, Helen Opie, Paul Anguria, Monday Moses Paga, Deborah Lillian Nambirye,

Michael Adrogu Ugen, Nelson Wanyera (2021). The Profitability of Fertilizer Micro Dosing and Timing of Weeding in Finger Millet Production in the Semi-Arid Areas of Uganda. *International Journal of Agricultural Economics* 2021; 6(3): 139-144. <http://www.sciencepublishinggroup.com/j/ijae> doi: 10.11648/j.ijae.20210603.16 ISSN: 2575-3851 (Print); ISSN: 2575-3843 (Online).

5. **Bisikwa, Roger L. Becker, Vince A. Fritz, Kevin Natukunda and Martha I. Natukunda** (2021). Response of giant foxtail and wild proso millet to artificial light quality alteration. *Journal of Scientific Agriculture* 2021, 5: 26-31 doi:10.25081/jsa.2021.v5.6898. <http://updatepublishing.com/journal/index.php/jsa>. ISSN: 2184-0261
6. **Jenipher Bisikwa, Roger L. Becker, Vince A. Fritz, Kevin Natukunda and Martha I. Natukunda** (2021). Effect of crop canopy manipulation on light interception, growth, and development of wild proso millet and giant foxtail in row-cropping systems. *African Journal of Agricultural Research*, Vol. 17(1), pp. 147-155, January, 2021 DOI: 10.5897/AJAR2020.15223 Article Number: 1DC3E0165851 ISSN: 1991-637X Copyright ©2021 Author(s) retain the copyright of this article <http://www.academicjournals.org/AJAR>
7. **Bisikwa, J., Walukano, W., Ugen, M.A., Muyinda, A.M. and Muyonga, J.H.** (2020). Effect of variety and soil fertility management on performance of grain amaranth in different agro-ecological zones in Uganda. *Makerere University Journal of Agricultural and Environmental Sciences*, Vol. 9 (1). pp. 39 - 57, 2020. Printed in Uganda. All rights reserved © Makerere University 2020. ISSN 1563-3721
8. **Jenipher Bisikwa, Martha I. Natukunda, Roger L. Becker** (2020). Effect of Method and Time of Management on European Buckthorn (*Rhamnus cathartica* L.) Growth and Development in Minnesota. *Journal of Scientific Agriculture* 2020, 4: 113-123 doi:10.25081/jsa.2020.v4.6457 <http://updatepublishing.com/journal/index.php/jsa>. ISSN: 2184-0261
9. Joseph Ekwangu, John Steven Tenywa, **Jenipher Bisikwa**, Charles Andiku, Paul Anguria, Monday Moses Paga, Deborah Lillian Nabirye, Michael Adrogu Ugen & Nelson Wanyera (2020). Effect of Inorganic Fertilizer Micro-dosing and Weed Management Regimes on Finger Millet Productivity in Uganda. *Journal of Agricultural Science*; Vol. 12, No. 12; 2020 ISSN 1916-9752 E-ISSN 1916-9760 Published by Canadian Center of Science and Education
10. Ekwangu J., Anguria P., Andiku C., Tenywa J. S., **Bisikwa J.**, Wanyera N. & Ugen M. A. (2020). Fertilizer Micro-dosing and Timing of Weeding for Enhancing Finger-Millet Production in Eastern Uganda. *Journal of Agricultural Science*; Vol. 12, No. 11; 2020 ISSN 1916-9752 E-ISSN 1916-9760 Published by Canadian Center of Science and Education
11. Yasmin Ibrahim, Yona Baguma, Wilfred Abincha, Paul Gibson, Richard Edema and **Jenipher Bisikwa** (2020). Flowering problems and their possible solution in cassava breeding. *Journal of Scientific Agriculture* 2020,4:83-89.doi:10.25081/jsa.2020.v4.6220 <http://updatepublishing.com/journal/index.php/jsa>
12. Vivian Namutebi, Lukman Nagaya Mulumba and **Jenipher Bisikwa** (2020).

Evaluation of Cereal-Legume Cropping on Striga Control and Maize Yield. Journal of Agricultural Science and Technology B 10 (2020) 43-48 doi: 10.17265/2161-6264/2020.01.005. DAVID PUBLISHING

13. Martha Ibore Natukunda, Kevin Natukunda, Gerald Kyeyune, Sharon Mbabazi Tusiime, Isaac Agbemafle and **Jenipher Bisikwa** (2020). Management strategies for the noxious invasive parthenium weed (*Parthenium hysterophorus* L.) in Uganda. African Journal of Agricultural Research, Vol. 15(1), pp. 1-9, January, 2020 DOI: 10.5897/AJAR2019.14569 Article Number: 6652D2F62620 ISSN: 1991-637X Copyright ©2020 Author(s) retain the copyright of this article. <http://www.academicjournals.org/AJAR>
14. Mbeyagala E.K., **Bisikwa J.**, Tukamuhabwa P., and Mukasa S.B. (2018). Trait Association and Stability of Virus Resistance among Cowpea Genotypes in Uganda. African Crop Science Journal, Vol. 26, No. 2, pp. 259 - 275 ISSN 1021-9730/2018 Printed in Uganda. All rights reserved © 2018, African Crop Science Society
15. Mbeyagala E. K., Tukamuhabwa P., **Bisikwa J.**, Holton T., Mukasa S. B (2018). Next-Generation Sequencing Reveals the First Complete Genome Sequence of *Cowpea aphid-borne mosaic virus* from Uganda. American Society for Microbiology Volume 6 Issue 3 Genome Announc 6:e01491-17. <https://doi.org/10.1128/genomeA.01491-17>.
16. Rodenburg J, Cissoko M, Kayongo N, Dieng I, **Bisikwa J**, Irakiza R, Masoka I, Midega CAO and Scholes JD (2017). Genetic variation and host–parasite specificity of *Striga* resistance and tolerance in rice: the need for predictive breeding. New Phytologist 214 (3) 1267–1280.
17. Omiat E. G., J. M. Ssebuliba, V. A. Ochwoh and **J. Bisikwa** (2015). Sweetpotato tuber yield and carotenoid response to green manure and inorganic fertilizers in eastern Uganda. African Journal of Applied Agricultural Sciences and Technologies 2[1]: 92-103
18. Ddungu S.P., W. Ekere, **J. Bisikwa**, R. Kawooya, D. Okello Kalule, M. Biruma (2015). Marketing and Market integration of cowpea (*Vigna unguiculata* L. Walp) in Uganda. Journal of Development and Agricultural Economics 7(1): 1-11
19. Emily Wabuyele, Agnes Lusweti, **Jenipher Bisikwa**, Gerald Kyenune, Krissie Clark, Wayne D. Lotter, Andrew J. McConnachie and Mersie Wondi (2014). A Roadside Survey of the Invasive Weed *Parthenium hysterophorus* (Asteraceae) in East Africa. Source: Journal of East African Natural History, 103(1):49-57. 2014. Published By: Nature Kenya/East African Natural History Society, DOI:<http://dx.doi.org/10.2982/028.103.010> URL:<http://www.bioone.org/doi/full/10.2982/028.103.0105>
20. Emmanuel K. Mbeyagala, Blasio S. Mukasa, Phinehas Tukamuhabwa & **Jenipher Bisikwa** (2014). Evaluation of Cowpea Genotypes for Virus Resistance Under Natural Conditions in Uganda. Journal of Agricultural Science; Vol. 6, No. 10; 2014 ISSN 1916-9752 E-ISSN 1916-9760 Published by Canadian Center of Science and Education
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- [*Amaranthus sp.*] performance in selected agroecological zones in Uganda. African Journal of Applied Agric.l Sciences and Technologies 1[2]: 115-130
22. **J. Bisikwa**, R. Kawooya, J.M. Ssebuliba, S.P. Ddungu, M. Biruma and D.K. Okello (2014). Effects of plant density on the performance of local and elite cowpea [*Vigna unguiculata* L. (Walp)] varieties in Eastern Uganda. African Journal of Applied Agricultural Sciences and Technologies 1[1]: 28-41
 23. J.M. Ssebuliba, R. Kawooya, **J. Bisikwa** , S.P. Ddungu, M. Biruma and D.K. Okello (2014). Influence of intercropping on the performance of elite cowpeas [*Vigna unguiculata* L. (Walp)] varieties and maize [*Zea mays* L.] in Eastern Uganda. African Journal of Applied Agric. Sci. and Technologies [1]: 42-51
 24. Frank Olwari, **Jenipher Bisikwa**, Archileo Natigo Kaaya and David Kalule Okello (2013). Tolerance Levels of Peanut Varieties against *Aspergillus flavus* Infection. The International Open Access Journal of Plant Pathology & Microbiology. ISSN:2157-7471
 25. Frank Olwari, Archileo N. Kaaya, and **Jenipher Bisikwa** (2012). Evaluation of peanuts for Mold Infection and Aflatoxin Contamination. LAP LAMBERT Academic Publishing. ISBN: 978-8465-1925-7
 26. Okello, D. K., Kaaya, A. N., **Bisikwa, J.**, Were, M., & Oloka, H. K. (2010). Management of Aflatoxins in Groundnuts: A manual for Farmers, Processors, Traders and Consumers in Uganda. National Agricultural Research Organisation, Entebbe. ISBN: 978-9970-401-00-0