

# CURRICULUM VITAE

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## 1.0 PERSONAL DATA:

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- 1.1 NAME: EMILY JEPKOSGEI TOO
- 1.2 PERMANENT ADDRESS: P.O. BOX 5224-30100  
ELDORET
- 1.3 CURRENT ADDRESS: DEPARTMENT OF BIOLOGICAL SCIENCES  
UNIVERSITY OF ELDORET  
P.O BOX 1125-30100  
ELDORET  
Tel: +254 (0)722 221828; +254 (0) 773048418  
E.mail: [emiltoo2002@yahoo.com](mailto:emiltoo2002@yahoo.com);  
[emilie.too@gmail.com](mailto:emilie.too@gmail.com)  
[Emilly.too@uoeld.ac.ke](mailto:Emilly.too@uoeld.ac.ke)
- 1.4 DATE OF BIRTH: 05-08-1972
- 1.5 NATIONALITY: Kenyan
- 1.6 CITIZENSHIP: Kenyan
- 1.7 SEX: Female
- 1.8 MARITAL STATUS: Married

## 2.0 ACADEMIC QUALIFICATIONS

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- 2.1 2006-2011: **Doctor of Philosophy in Botany (Plant Physiology and Biochemistry)**.  
Moi University, Kenya and the Swedish University of Agricultural Sciences (SLU),  
Sweden. Course work, Research & Thesis.

Title of thesis: *Physiological and Molecular Characterization of Resistance to Aluminium Stress in Selected Grain Sorghums.*

- 2.2. 1998 –2002: **Master of Philosophy in Botany (Plant Physiology)**. Moi University, Eldoret, Kenya. Course work, Research & Thesis
- Title of Thesis: Responses of Selected Common Bean (Phaseolus vulgaris, L) Cultivars to low pH, Aluminium Stress and Fertilizer and Lime Application.*
- 2.3. 1993 - 1997: **Bachelor of Science General (Botany major and Zoology minor)**-Second Class honours upper division. Moi University, Eldoret, Kenya.
- 2.4. 1988 - 1991: Kenya Certificate of Secondary Education (K.C S.E.). Moi High School-Kabarak. Grade B-
- 2.5. 1979 - 1987: **Kenya Certificate of Primary Education (K.C.P.E)**. Dry's Primary School. 61 points.

### **3.0 CONFERENCES AND TRAINING WORKSHOPS ATTENDED.**

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**2019:** Attended a training workshop on ‘Using research findings to inform policy and practice in Kenya’ held at ILRI, Nairobi on 11<sup>th</sup> to 12<sup>th</sup> March, 2019.

**2018:** Attended an inception workshop of the policy training initiative organized by ILRI in partnership with the AgriFose 2030 programme held on 28<sup>th</sup> November 2018 at the Emory Hotel, Nairobi Kenya.

Attended a CCRP East and Southern Africa CoP Regional Research Methods workshop held on 30<sup>th</sup> July – 3<sup>rd</sup> August, 2018 at Lush Garden Hotel, Arusha, Tanzania, funded by the Mcknight Foundation. Given a certificate of attendance.

Attended a staff ISO training workshop organized by Directorate of Quality Assurance, University of Eldoret.

Attended a CCRP East and Southern Africa CoP Regional Research Methods workshop held on 5<sup>th</sup> – 9<sup>th</sup> February, 2018 at ABC leadership center, Karen, Nairobi. Given a certificate of attendance.

2017: Attended a Soil Health Workshop held on 13<sup>th</sup> – 17<sup>th</sup> November, 2017 at the Kenmosa Hotel, Eldoret Kenya.

Organized and attended a Farmer Training Workshop held at Sega Catholic Church on 14<sup>th</sup> September, 2017. Main focus of the training was to share research findings with the farmers and train on benefits of community based seed systems.

Organized and attended a Farmer Training Workshop held at Sega Catholic Church on 8<sup>th</sup> – 11<sup>th</sup> June, 2017. Main focus was to engage farmers in simple soil testing procedures and training on good agronomic practices and management of acid soils for improved crop production.

Attended a Research Methods Training Workshop held at Maanzoni Lodge on 13<sup>th</sup> – 17<sup>th</sup> February, 2017 funded by the Mcknight Foundation.

2015: Attended the first inaugural Conference of Bioethics Society of Kenya held on 16<sup>th</sup> and 17<sup>th</sup> December, 2015 held at Kenyatta University Conference Centre, Nairobi. Awarded a certificate of participation.

Attended a training workshop on 'Basic concepts and Practice of multistakeholder facilitation process' that was held at Emerge-Africa, Karen, Nairobi Kenya on 7th to 9th September, 2015. The workshop was organized by NGO-Farmer Research Network (FRN) and funded by the Mcknight Foundation. Awarded a certificate of participation.

Training on Moodle platform an online teaching tool

ODK training workshop organized by the Mcknight Foundation

Training on Research Africa grant platform organized by directorate of Research and Innovation, University of Eldoret.

Staff training workshop on Quality Management Systems and ISO requirements and procedures organized by Directorate of Quality Assurance, University of Eldoret.

Attended and presented a paper at the first Multidisciplinary UoE conference

2014: Attended a workshop on 'Improving and Internationalizing University Courses' organized by the Directorate for Research and Graduate Training at Makerere University and Swedish University of Agricultural Sciences (SLU) that was held at Kasangati Resort, Kampala Uganda on 10<sup>th</sup> – 12<sup>th</sup> June, 2014.

2013: Attended and presented a paper at the First Interdisciplinary Conference organized by University of Eldoret and Anabra State University that was held on 3<sup>rd</sup> -5<sup>th</sup> Sept. 2013. Awarded a certificate of participation.

Attended a conference on 'Enhancing Gender Equity in the Leadership and Management of Higher Education' and a training workshop that was organized by the Association of Common Wealth Universities (ACU) in collaboration with the University of Nairobi held on 26<sup>th</sup>-30<sup>th</sup> August, 2013 at the University of Nairobi and Nairobi Safari Club. Awarded a certificate of participation.

Attended an International workshop on 'A network in Capacity Building in Molecular Biology and Bioinformatics-AGNES B' held at ICIPE, Kasarani Nairobi on 14<sup>th</sup>- 15<sup>th</sup> August, 2013.

2012: Attended a Health and Safety workshop held at Chepkoilel University College.

Attended the SLU Africa Food Security Research Symposium' held at the Metropole Hotel, Kampala, Uganda on 4<sup>th</sup> – 6<sup>th</sup> Dec. 2012.

2010: Attended a training on 'Enhancing the participation of African women scientists in climate change assessment, information dissemination and policy advocacy' held at Kisumu Hotel on 30<sup>th</sup> August 2010-1<sup>st</sup> September 2010.

Attended a sorghum conference on 'Current Challenges in Sorghum Production' held at Hotel Sirikwa, Eldoret, Kenya on 29<sup>th</sup> March – 1<sup>st</sup> April 2010.

Attended a regional workshop of the 'East and Horn of Africa Community of Practice' organized by Collaborative Crop Research Program (CCRP) held at Imperial Hotel,

Kisumu, Kenya on May 10<sup>th</sup>-15<sup>th</sup> 2010. The aim of the workshop was to strengthen the capacities of teams of different projects.

2009: Attended a Marker Assisted Selection (MAS)/ Bioinformatics Course in BecA-ILRI Campus Nairobi Nairobi, Kenya held on 12<sup>th</sup> -16<sup>th</sup> October 2009. Awarded a Certificate of attendance.

2007: Attended an International Training Course on Molecular Biology and Proteomics held in the Departments of Biological Sciences and Biochemistry, Nairobi University, Nairobi, Kenya on 1<sup>st</sup> Oct-10<sup>th</sup> Oct 2007. Awarded a certificate of attendance.

2006: Participated in the Campus-wide Research workshop held in Chepkoilel Campus, Moi University on 28<sup>th</sup> to 3<sup>rd</sup> may, 2006. Awarded a certificate of participation.

Participated in the Kenyatta University 2<sup>nd</sup> National Biological Postgraduate Scientific conference held on 8<sup>th</sup> – 10<sup>th</sup> August, 2006 at Kenyatta University, Nairobi, Kenya. Awarded a certificate of participation.

Attended and participated in GIS training course on GIS applications in environmental monitoring in Taita Hills hosted by the Regional Centre for mapping Resources for Development (RCMRD), Nairobi, Kenya on 25<sup>th</sup> Sept – 6<sup>th</sup> Oct. 2006. Awarded a certificate.

2003: Attended a Multidisciplinary Training Programme on Tropical Lakes and Wetlands Ecosystem Management. Training organized by the Pan African Start Secretariat (PASS) at Kenya Wildlife Training Institute, Naivasha on August 4<sup>th</sup> - 31<sup>st</sup> August, 2003. Awarded a certificate of Attendance.

#### **4.0. SCHOLARSHIPS AND RESEARCH GRANT AWARDS**

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- 2015- 2020: The Mcknight Foundation's Collaborative Crop Research Program grant on Sorghum Breeding. Phase II. Role: Co-investigator
- 2014:2015: SLU Global grant for Msc student training and teacher's exchange between University of Eldoret and SLU. Role: Co-investigator
- 2011-2013: SIDA/SAREC grant for study on genetic resources of Yellow Nutsedge in East Africa. Role: Co-investigator
- 2010-2013: The Mcknight Foundation's Collaborative Crop Research Program grant on Sorghum Breeding. Phase I. Role: Co-investigator.
- 2006-2010: SIDA-SAREC grant through Bio-Earn on Screening of Kenyan Sorghum (*Sorghum bicolor*, L. Moench) Genotypes for Tolerance to Aluminium Toxicity and Phosphorus Deficiency. Role- D.Phil Student
- 2004-2005: Moi University Research Fund (MURF). Screening Local Common Bean (*Phaseolus vulgaris*) Collections for Tolerance to Phosphorus Deficiency Role- Principal Investigator
- 1999-2001: Moi University partial scholarship and International Foundation of Science (IFS) research grant for M-Phil. program
- 1993-1997: Kenyan Government Scholarship - B.Sc. Degree programme

## 5.0 EMPLOYMENT HISTORY

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- 5.1 Jan 2015 - to date: Senior Lecturer in the Department of Biological Sciences, University of Eldoret.
- 5.1 Feb 2006- to Dec 2014 : Lecturer in the Department of Biological Sciences, University of Eldoret.
- 5.2 May 2003-Jan 2006: Tutorial Fellow in the Department of Botany, Chepkoilel Campus, Moi University
- 5.3 Jan 2003-May 2003: Part-time Assistant lecturer in the Department of Botany, Chepkoilel Campus, Moi University.
- 5.4 Nov. 2001- Dec. 2002: Research Assistant in the Department of Botany, Moi University.

## 6.0 TEACHING AND SUPERVISION EXPERIENCE

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### 6.1 Teaching

Year	Courses taught/special projects supervised
2003/04:	Basic Botany 1 and Basic Botany 11
2004/05:	Genetics and Evolution and Plant Physiology Project Supervision:- 4 <sup>th</sup> year undergraduate student. Project title: Screening Common Bean ( <i>Phaseolus vulgaris</i> ) Cultivars for Tolerance to Phosphorus Deficiency
2005/06:	Basic Botany 11 and Plant Physiology 1
2007/08:	Plant Physiology 1, Genetics and Evolution
2008/09:	Cryptogamic Botany, Plant physiology 1. Supervision of 2 special projects; 4 <sup>th</sup> year undergraduate students. Project titles: 1. Response of Selected Common Bean Varieties to Phosphorus at Vegetative Stage, 2. Mycorrhizal Development and Phosphorus Concentration in Selected Kenyan Sorghum Cultivars
2010/11:	Plant Physiology 1 and Microbial Physiology; Supervision of two special projects. Project titles:1. The prevalence of pathogenic <i>Escherichia coli</i> in children below three years attending Uasin Gishu District hospital. 2. The Effect of Fertilizer Application on Growth of <i>Azospirillum</i> Bacteria
2011/12:	Basic Botany 1; Plant Physiology 1; Plant Biochemistry; Supervision of special projects. Project titles: Evaluation of antibacterial activity of crude extracts of <i>Bersama abyssinica</i> ; Characterization of indigenous rhizobial strains and commercial rhizobium for tolerance to acid and salt stress.
2012/13:	Basic Botany 1; Plant Physiology 1; Plant Biochemistry; Molecular markers and molecular Breeding; Microbial Physiology; Supervision of special projects; Characterization of yellow

- nutsedge (*Cyperus esculentus*) accessions using morphological markers.
- 2013/2014: Plant Physiology 1; Plant Biochemistry; Molecular markers and molecular Breeding; Seminars (postgraduates); Supervision of nine fourth year special projects and one Msc. student
- 2014/2015: Plant Physiology 1; Plant Biochemistry; Molecular markers and molecular Breeding; Microbial Metabolism; Seminars (postgraduates); Supervision of fourth year special projects and one Msc. student; Physiological Plant Ecology, Photosynthesis and Bioproductivity, Phytochemistry.
- 2015/2016: Basic Botany 1; Plant Physiology 1&11; Plant Biochemistry; Molecular markers and molecular Breeding; Microbial Physiology; Seminars (postgraduates); Mineral Nutrition of Higher Plants; Plant water relations; Plant cell biology. Supervision of two M.Sc students
- 2016/2017: Plant Physiology 1 & II, Molecular markers and molecular Breeding; Microbial Physiology; Plant Biochemistry, Seminars (postgraduates); Mineral Nutrition of Higher Plants; Plant water relations; Plant cell biology. Supervision of one MSc students
- 2017/2018: Plant Physiology 1 & II, Molecular markers and molecular Breeding; Microbial Physiology; Plant Biochemistry, Seminars (postgraduates); Mineral Nutrition of Higher Plants; Plant water relations; Plant cell biology. Supervision of one MSc students
- 2018/2019: Plant Physiology 1 & II, Molecular markers and molecular Breeding; Microbial Physiology; Plant Biochemistry, Seminars (postgraduates); Mineral Nutrition of Higher Plants; Plant water relations; Plant cell biology. Supervision of three MSc students and one PhD student.
- 2019/2020: Fundamentals of Plant Physiology, Plant Physiology II, Molecular markers and molecular Breeding; Microbial Physiology; Biomolecules of Plants, Seminars (postgraduates). Supervision of two MSc students and two PhD student.

## 6.2 Supervision of postgraduate students.

- 2011 to date: Joseph Rotich Chemwetich (SC/D.PHIL/B/02/11): PhD student in Plant Physiology and Biochemistry: Completed data collection and analysis. Writing manuscripts and thesis monograph. title
- 2012: Lucy Wanjohi (SC/PGB/026/09): Title of thesis: Determination of bacterial load and diversity in Lake Nakuru and their ability to degrade plastics and oil. Graduated
- 2013: MSc student (Microbiology) Samuel Soi (SC/PGB/059/09): Graduated
- 2015 to Date: MSc student (Plant Physiology) -Limo Reubens (SC/PGB/066/14); Germination and storage behaviour of fresh seeds of *Ekebergia capensis* (Sparmm). Completed and published one manuscript. Graduated. Writing another manuscript
- 2017-to date: MSc student. (Plant Physiology). Janeth Sang (SSCI/BIO/M/003/16).

Thesis title: Reclaiming acidic low phosphorus soils of Uasin Gishu using selected acid tolerant cowpea cultivars. Completed laboratory and field experiments and data collection. Currently writing her thesis draft and drafting manuscripts

2018-to date: Msc student (Plant Physiology). Hillary Kirui. Completed writing his research proposal and successfully defended it before the departmental board of postgraduate studies. Currently undertaking his research

2019 to date: Mary Tanui (SSCI/BIO/P/001/16) PhD student in Genetics and Plant Breeding. Completed proposal writing. Carrying out field experiments.

### **6.3 Thesis Examination**

6.3.1 Emmy Chepkoech (AGR/PGB/04/09): Characterization of Cassava (*M. esculenta*) Mutants and Hybrids Using Morphological and Simple Sequence Repeat Markers. Msc Thesis. November, 2012.

6.3.2 Ayabei Kiplagat (SC/PGC/017/10): Evaluation of Brown algae in Biosorption of selected Heavy metal ions in wastewater. December, 2012.

6.3.3 Elphas K. Ruttoh (AGR/PGC/05/08): Screening of Chickpea Genotypes for Resistance to the African Bollworm, 2013.

6.3.4 Thomas K. Matonyei (SC/D.PHIL/015/10): Genetic diversity and Mapping of Aluminium Tolerance Quantitative Trait loci in Selected Maize (*Zea mays L.*) Germplasm. 2014.

6.3.5 Awalla Boniface Juma (SC/PGB/047/09): Genetic Diversity and Population Structure of Napier Grass (*Pennisetum purpureum* Schumach) in Western Kenya. 2015.

6.3.6 Ngure Karanja David (AGR/PGB/04/010): Sensory Evaluation and Characterization of improved Lablab Genotypes Using Morphological and Simple Sequence Repeat Markers. 2015.

6.3.7 Josephine, Sarah Kunguni (SC/PGB/029/11): Investigation of Ethrel Gametocide in Finger Millet Emasculation through Morphological and Genetic Screening of F1. 2015.

### **7.0 ADMINISTRATIVE/OTHER RESPONSIBILITIES**

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2016: to date Volunteer student Counselor

Deputy returning officer of the 4<sup>th</sup> University of Eldoret Students Organization (UESO) elections. I advocated for peaceful campaigns, and in consultation with the Dean of Students, the Returning Officer, colleague deputy returning officers and Student electoral commissioners, conducted and supervised elections on 15<sup>th</sup> April and delivered credible results.

2015: Member of committee on actualization of MoU between University of Eldoret and Kenya Seed Company. Participated in drafting of the current draft memorandum of understanding (MoU) between the two institutions.

Member of UoE agribusiness and trade fair organizing committee (Chairperson of Publicity and Entertainment subcommittee). Participated in a one hour radio

talk show at Kass FM on 9th and 20th Sept. Did a one minute TV advert about the trade fair at Kass Tv

- 2014: Member of UoE agribusiness and trade fair organizing committee (Convener of Publicity and Entertainment subcommittee).
- 2013: Member of UoE Conference organizing committee
- 2013-to date: Member of the Editorial board of the Journal of Pure and Applied sciences (EAPAS).
- 2012 – 2015: Warden, Hostels G, Rusinga and Chania A and B.
- 2-01-2013-28-01-2013: Acting head of Department of Biological Sciences.
- 2011 – 2013: Departmental Examination coordinator.

## 8.0 PUBLICATIONS

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- 8.1 E. J. Too<sup>1</sup>, S. Gudu, B. A. Were and A. O. Onkware. 2020. Breeding Grain Sorghum for Tolerance to Aluminium Toxicity. *AER Journal* Volume 4, Issue 1, pp. 123-136.
- R.L. Kibet, **E.J. Too**, A. Omari and M. Meso. 2019. Effects of Varying Storage Conditions on the Vigour of Fresh Seeds of *Ekebergia capensis*. *Africa Environmental Review Journal*. Volume 3, Issue 2, pp. 212-223. ISSN: 1727-8341
- 8.2 **Too, E.J.** 2019. Declining soil fertility in Kenya's grain basket: A threat to food security. A Policy Brief. Published online. <https://www.slu.se/en/collaboration/international/slu-global/agrifose/output/>
- 8.3 Soi K. Samuel, Ngeiywa M. Moses and **Too J. Emily**. 2019. Prevalence of Enterobacteriaceae Isolated from Childhood Diarrhoea in Mukuru Slums, Nairobi- Kenya. *Journal of Advances in Microbiology*. 17(3): 1-9, 2019; Article no.JAMB.45671 ISSN: 2456-7116
- 8.4 **Too, E.J.**, Onkware,A.O., Were,B,A., Gudu, S., Carlson, A. and Geleta, M. 2018. Molecular Markers Associated with Aluminium Tolerance in Sorghum bicolor. *Hereditas*. 155:20.
- 8.5 L. Wanjohi, L., Mwamburi<sup>1</sup>, L., **Too, E.** and Kosgei, J. 2018. Utilization of Locally Available Bacteria in Degradation of Plastics. *AER Journal*. Vol 3, Issue 1, pp. 125-134



- 8.6 Jeruto, P., **Too, E.J.**, Mwamburi, L.A. and Amuka, O. 2015. An Inventory of Medicinal Plants used to Treat Gynaecological- Obstetric-Urino-Genital Disorders in South Nandi Sub County in Kenya. *Journal of Natural Sciences Research*. 5 (18): 136-152.
- 8.7 Wanjohi, L., Mwamburi, L., **Too, E.J.**, Aloo, B. and Kosgei, J. (2015). Isolation and identification of bacteria with bioremediation potential of oil spills in lake Nakuru, Kenya. *Asian Jr. of Microbiol. Biotech. Env. Sc.* 17(4): 831-838.
- 8.8 **Too, E.J.**, A.S. Carlsson, A.O. Onkwere, B.A. Were, M. Geleta, T. Bryngelsson, and S. Gudu. (2014). Cell Membrane integrity, callose accumulation and root growth in aluminium stressed sorghum seedlings. *Biologia Plantarum* 58(4): 768-772. DOI: 10.1007/s10535-014-0455-0.
- 8.9 **Too, E.J.**, B.A. Were, A.O. Onkwere, J.H. Ringo, P. Kisinyo, A. Carlsson, E. Ouma, M. Geleta and S. Gudu. (2014). Response of Selected Sorghum (*Sorghum bicolor* L. Moench) Germplasm to Aluminium stress. *African Journal of Agricultural Research*. 9 (21):1651-1662.
- 8.10 Maritim, K. K., Were, B.A., Gudu, S., Onkwere, A.O. and **Too, E.J.** (2013). Phosphorus Efficiency among Selected Sorghum (*Sorghum bicolor*, L. Moench) Lines and Segregating Families. *African journal of Education, Science and Technology*. 1 (2): 158-162.
- 8.11 Kisinyo, P.O., Othieno, C.O., Gudu, S.O., Okalebo, J.R., Opala, P.A., Ngetich, W.K., Nyambati, R.O., Ouma, E.O., Agalo, J.J., Kebeney, S.J., **Too, E.J.**, Kisinyo, J.A. and Opile, W.R. (2014). Immediate and Residual Effects of Lime and Phosphorus Fertilizer on Soil Acidity and Maize Production in Western Kenya. Accepted for publication in *Journal of Experimental Agriculture* 50 (1), pp. 128–143.
- 8.12 Ouma E, Ligeyo, D., Matonyei, T., Agalo, J. Were, **Too, E.** Onkwere, A., Gudu, S., Kisinyo, P. and Nyangweso, P. (2013). Enhancing Maize Grain Yield in Acid Soils of Western Kenya Using Aluminium Tolerant Germplasm. *Journal of Agricultural Science and Technology B* 2. pp.33-46.
- 8.13 Aloo, B.N., Matasyoh, L.G. and **Too, E.J.** (2013). Bioconversion of organic residues into Single Cell Protein (SCP); Turning Debris into Delicacies. *African Journal of Education, Science and Technology, Vol 1, No. 2.* pp 32-37.
- 8.14 Cheprot, Reuben K., Matonyei, Thomas K.1, Were, Beatrice A.1, Dansasuk, O. George, Onkwere, Augustino O., Ouma, Evans O., **Too, Emily J.**, Liu, J., Gudu, S. and Kochian, L. V. (2013). Phylogenetic Relationship Among Kenyan Sorghum Germplasms based on Aluminium Tolerance. *African Journal of Biotechnology*. Vol. 12(22). pp 3528-3536.
- 8.15 Ouma, E., Ligeyo, D., Matonyei, T., Were, B., Agalo, J. **Too, E.**, Onkwere, A., Gudu, S., Kisinyo, P., Okalebo, R. and Othieno, C. (2012). Development of Maize Single Cross Hybrids for Tolerance to Low Phosphorus. *African Journal of Plant Science* Vol 6(14):394-402.

- 8.16 Ringo, J.H., Mneney, E.E., Onkware, A.O., Were, B.A., **Too, E.J.**, Owuoche, J.O. and Gudu, S.O. (2010). Tolerance to aluminium toxicity in Tanzanian sorghum genotypes. *African crop Science Journal*, 18 (4): 155-164.
- 8.17 **Too, E.J** and Onkware, A.O. (2008). Tolerance of Local Common Bean (*Phaseolus vulgaris*, L.) Accessions to Phosphorus Deficiency during Vegetative growth. *East African Journal of Pure and Applied Sciences*, 1(1):61-66.
- 8.18 Kireger, E. and **Too, E.J.** (2005). The Potential of Biotechnology to Promote Organic Farming and Minimize Environmental Damage. In *Proceedings of the Fourth Workshop on Sustainable Horticultural Production in the Tropics* held at Moi University, 24<sup>th</sup>–27<sup>th</sup> November, 2004. (Eds, Wesonga, J.M., Masinde, P.W., Losenge, T., Ngamau, K., Agong, S.G., Anjichi, V., Fricke, A., Hau, B. and Stutzel, H.). pp 135-144. **ISBN: 9966-923-04-7**
- 8.19 Mwamburi, L.A. and **Too, E.J.** (2004). The Contribution of Indigenous Vegetables to Household Food Security: The Role of Women. In *Proceedings of the Fourth Workshop on Sustainable Horticultural Production in the Tropics*, held at Moi University, 24<sup>th</sup>–27<sup>th</sup> November, 2004. (Eds, Wesonga, J.M., Masinde, P.W., Losenge, T., Ngamau, K., Agong, S.G., Anjichi, V., Fricke, A., Hau, B. and Stutzel, H.). pp 313. **ISBN: 9966-923-04-7**
- 8.20 Onkware, A.O., Chemwetich, J. and **Too, E.J.** (2003). Screening and Selection of acid Tolerant Rhizobia strains and bean cultivars for acid soils of Uasin Gishu District, Kenya. *Abstracts of End of Project Conference (ARF)* held at KARI Headquarters, Nairobi, 2<sup>nd</sup> – 4<sup>th</sup> December 2003. pp22
- 8.21 **Too, E.J.**, Onkware, A.O. and Koech, J.K. (2003). Mycorrhizal Effects on Growth and Suppression of Root Pathogens in Some Horticultural Crops. In *proceedings of the Third Horticultural Workshop on Sustainable Horticultural Production in the Tropics* held at Maseno University. 26<sup>th</sup> – 29<sup>th</sup> November 2003. (Eds, Abukutsa-Onyango, M.O, A.N. Muriithi, V.E. Anjichi, zk. Ngamau, S.G. Agong, A. Fricke, B. Hau and H Stutzel). pp 160-165. **ISBN:9966-758-11-9.**
- 8.22 **Too, E.J.**, Onkware, A.O. and Gudu, S. (2002). Effect of lime and N+P fertilizer application on growth and production of selected common bean (*Phaseolus vulgaris*, L) cultivars on an acid soil in Uasin Gishu district Kenya. In *Proceedings of the Second Horticultural Seminar on Sustainable Horticultural Production in the Tropics*. (Eds- Wesonga, J.M., T. Losenge., C.K. Ndungu, K. Ngamau, J.B.M. Njoroge., F.K. Ombwara and S.G. Agong). JKUAT. pp 24 – 29. **ISBN: 9966-923-27-6**
- 8.23 **Too, E.J.** and Onkware, A.O. (2000). Response of selected common bean cultivars to fertiliser and lime application on an acid ferralsol, Uasin Gishu district, Kenya. In *Proceedings of the 7<sup>th</sup> KARI Biannual Scientific Conference*. (Eds-Mukisira E.A., F.H. Kiriro., J.W. Wamuongo, L. Wamae, F.M. Muriithi, W. Wasike). KARI, Nairobi, Kenya. pp 149-154. **ISBN: 9966-879-49-8**
- 8.24 **Too.E.J.** , A.O. Onkware & S. Gudu. (1999). Effect of Aluminium ions on growth of some Kenyan bean (*Phaseolus vulgaris* ) varieties. In *Proceedings of First Horticultural*

*Seminar*. (eds-Wesonga, J.M., T. Losenge., C.K. Ndungu, K. Ngamau, J.B.M. Njoroge., F.K. Ombwara and S.G. Agong). JKUAT. pp 16

## **9.0 SEMINAR/CONFERENCE PAPERS AND OUTREACH ACTIVITIES**

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### 9.1 Participated in a farmers' field day at Matayos 1st August 2015

Farmers field day at Matayos-Busia, that was held on 26<sup>th</sup> July, 2014, to promote participatory variety selection (PVS) of advanced multiple stress sorghum varieties. A project funded by Mcknight Foundation.

### 9.2 Emily J. Too, Beatrice A. Were, Augustino O. Onkware, Joyce Agalo, Samuel Gudu, Geleta Mulatu and Anders S. Carlsson. (2012). Exploring genetic diversity and variability in tuber composition of yellow nutsedge - a potential crop for East Africa. A paper presented at the '*SLU Africa Food Security Research Symposium*' held at the Metropole Hotel, Kampala, Uganda on 4<sup>th</sup> – 6<sup>th</sup> Dec 2012.

### 9.3 Member of Board of Management (B.O.M) Magereza High School, Eldoret.

## **10.0 MANUSCRIPTS**

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### 10.1 **E. J.To**, Edward Anino, Samuel Gudu, Elizabeth W.Njenga, Mulatu Geleta, Beatrice A.Were, Joyce Agalo, Anders S.Carlsson and Augustino O.Onkware. Tubers of yellow nutsedge (*Cyperus esculentus*, L.) as a new source of phytonutrients and phytochemicals in Kenya. (Submitted)

## **11 POSTERS**

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### 11.1 S. Gudu, B. A. Were, A. O. Onkware, **E.J. Too**, P.O. Kisinyo, T. K.Matonyei, R. K. Cheprot, S. M. Maina, J. Agalo, E. O. Ouma, C. O. Othieno, J. R. Okalebo and J. O. Ochuodho. 2012. Developing Acid Soil Tolerant Sorghum Varieties for Western Kenya. Presented at the NCST workshop.

### 11.2 **Too, E.J.**, Onkware, A.O., Were, B.A., Geleta, M., Carlsson, A., Bryngelsson, T., Ringo J.H. and Gudu S. O. (2010). Physiological and Molecular Characterization of Tolerance to Aluminium toxicity in Selected Kenyan Sorghum (*Sorghum bicolor*, L. Moench) Germplasm. Presented at the Bio-Earn Conference in Eldoret Kenya.

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## **12.0 MEMBERSHIP**

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Member of the American Society of Plant Biologists (ASPB)  
Member of the Bioethics Society of Kenya (BSK)  
Member of Horticultural Association of Kenya (HAK)

### **13.0 RESEARCH INTERESTS**

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Identification and development of crops tolerant to abiotic stresses; Plant breeding (conventional and molecular breeding); Identification of molecular markers linked to/associated with tolerance to novel traits in plants; Plant Biotechnology; Analysis of plant genetic diversity; Documentation of medicinal plants and evaluation for antimicrobial properties

### **REFEREES**

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1. PROF. AUGUSTINO ONKWARE OSORO  
RONGO UNIVERSITY  
P.O BOX 103, RONGO, KENYA.  
E:Mail: [aonkware@yahoo.com](mailto:aonkware@yahoo.com)  
Tel: +254 722 610967
2. PROF. ELIZABETH W. NJENGA  
DEPARTMENT OF BIOLOGICAL SCIENCES  
UNIVERSITY OF ELDORET  
P.O. BOX 1125 30100 ELDORET, KENYA  
E.Mail: [njengae@yahoo.com](mailto:njengae@yahoo.com)  
Tel:+254 735 925989
3. PROF. SAMUEL GUDU  
RONGO UNIVERSITY  
P.O BOX 103, RONGO, KENYA.  
E.Mail: [samgudu2002@yahoo.com](mailto:samgudu2002@yahoo.com)  
Tel:+254 721 437766