

PUBLICATIONS AND PROCEEDINGS 2016 - 2019

PUBLICATIONS 2016

Kasozi, L.C., A. Muwonge, J.P. Sserumaga, D.K. Bomet, G. Asea and D. Makumbi. 2016. Stability analysis for *Imazapyr*-resistant maize hybrids across environments in Uganda. (Results reported during *NARO-MAK Joint Agricultural Dissemination Conference*. 21 - 24 November 2016, Speke Resort Munyonyo, Kampala). *Manuscript being developed for publication in peer reviewed journal*.

Monir, A. I. Y. **Sserumaga, J.P.** Ayesiga, B.S., Katuromunda, S. and G. Asea, 2016. Application of Morpho-Anatomical Traits of Maize to Quality Control in Seed Systems. *African Crop Science Journal*, Vol. 24, No. 4 pp 361 - 375 <http://dx.doi.org/10.4314/acsj.v24i4.3>

Sserumaga, J. P., Oikeh, S. O., Mugo, S., Asea, G., Otim, M., Beyene, Y., Abalo, G., & Kikafunda, J. 2016. Genotype by environment interactions and agronomic performance of doubled haploids testcross maize (*Zea mays* L.) hybrids. *Euphytica*, 207, 353-365. <http://dx.doi:10.1007/s10681-015-1549-2>

G. Asea, **J. Serumaga**, G. Abalo, S. Ochen, B. Zawedde, M.Otim, T. Kakembo, S.Mugo and S. Oikeh, 2016. Efficacy of MON 87460 Event in Conferring Drought Tolerance to Maize in Confined Field Trials in Uganda. *BIOSAFETY FORUM 2016 proceedings*

Sserumaga J. P., Bwanda G., Alibu S., Onaga G., Lamo J., Asea G., Otim M., Wasswa M., and Muwonge A. 2016. Reaction and classification of Rice Germplasm for Resistance to Ugandan Strain of Rice Yellow Mottle Virus. <http://www.naromakconference2016.com/>.

Sserumaga, J.P., Dan Makumbi, Asea Godfrey, Lee Simyung, Kiarie Njoroge, James W. Muthomi, George N. Chemining'wa, Michael Otim, Moses Waswa, Stephen Ochen, Fred Ssemazzi, Gyoung-Rae Cho. 2016. Genetics of resistance to kernel infection by *Aspergillus flavus* in tropical maize. P461

L Stewart, M Redinbaugh, S Wijeratne, G Mahuku, C Niblett, A Kiggundu, **G Asea**, A Wangai, K Willie, D Massawe. 2016. Virus populations associated with Maize lethal necrosis (MLN) in East Africa. *PHYTOPATHOLOGY* 106 (12), 1-1

Uke, **G. Asea**, K.T. Natsuaki. 2016. Phylogenetic Analysis and Serotyping of Rice yellow mottle virus Strains in Uganda. *Tropical Agriculture and Development* 60 (2), 81-88.

IYA Monir, JP Sserumaga, SB Ayesiga, S Katuromunda, **G Asea**. 2016. Application of morpho-anatomical traits of maize plant to quality control and quality assurance in maize seed system. *African Crop Science Journal* 24 (4), 361-375.

M. Worku, D. Makumbi, Y. Beyene, B. Das, S. Mugo, K. Pixley, M. Bänziger, F. Owino, M. Olsen, **G. Asea**, B. M Prasanna. 2016. Grain yield performance and

flowering synchrony of CIMMYT's tropical maize (*Zea mays* L.) parental inbred lines and single crosses. *Euphytica* 211 (3), 395-409.

Lussewa, RK, R Edema and **J Lamo** 2016. Magnitude of genotype x environment interactions for bacterial leaf blight resistance in rice growing areas of Uganda. *African Journal of Crop Science*. Vol 23 1 2016

Charles G W, G, Otim MH, **Lamo J**, Awio B , Ochwo-Ssemakula M. 2016 Evaluation of rice genotypes for resistance to the stalk-eyed fly (*Diopsislongicornis*) in rice in Uganda. *International Journal of Agronomy and Agricultural Research (IJAAR)* ISSN: 2223-7054 (Print) 2225-3610 (Online) <http://www.innspub.net> Vol. 9, No. 2, p. 9-21, 2016

Marco MM, Ochwo-Ssemakula M, Paul G, Edema R, Jimmy, **Lamo J** 2016 Inheritance of resistance to brown spot disease in upland rice in Uganda *Journal of Plant Breeding and Crop Science*. JPBCS-16.09.16-0613

Emmanuel PM. Katuromunda S and **Lamo J**. 2016 Soil Moisture Stress and Nitrogen Supply Affect the Growth Characteristics and Yield of Upland Rice Cultivars. *International Journal of Plant & Soil Science* 15(5): 1-10, 2017; Article no.IJPSS.30318 ISSN: 2320-7035.

Emmanuel PM. Katuromunda S and **Lamo J**. 2016 Effect of soil moisture stress duration on the growth characteristics and yield of rice cultivars *Journal of Agriculture and Environmental Sciences* ISSN 2334-2404 (Print) 2334-2412 (Online) | DOI: 10.15640/jaes.

Thomas Awio, JeninahKarungi, Bosco Bua and **Jimmy Lamo** 2016. Relating water management regimes and rice genotypes with occurrence of insect pests and diseases of rice in Uganda. *Journal of Global Agriculture and Ecology* 4(1): 12-20, 2016 ISSN: 2454-4205.

PUBLICATIONS 2017

Sserumaga J. P., Justine Ringo., Alois Kullaya., Barnabas Kiula., Ismail Ngolinda., Sylvester O. Oikeh., Stephen Mugo., Godfrey Asea., Michael Otim., Yoseph Beyene., & Grace Abalo 2017. Grain yield stability, heritability and genotype by environment interaction among double haploid maize hybrids under drought stress and optimum conditions. <http://ceg.icrisat.org/idv/>.

S. Matsumoto, T Tsuboi, **G Asea**, K Miyamoto, A Maruyama, M Takagaki, M. Kikuchi. 2017. Effects of plant density on the performance of selected African upland rice varieties. *African Journal of Agricultural Research* 12 (26), 2262-2272

IM Wamatsembe, **G Asea**, SM Haefele. 2017. A Survey: Potential Impact of Genetically Modified Maize Tolerant to Drought or Resistant to Stem Borers in Uganda. *Agronomy* 7 (1), 24

HN Kayaga, M Ochwo-Ssemakula, F Kagoda, BME Alladassi, **G Asea**, P. Gibson, R. Edema. 2017. Genotype by environment interaction effects on grain yield of highland maize (*Zea mays* L) hybrids. *Maydica* 62, M12

ZelalemZewdu, Paul Gibson, **Jimmy Lamo** and Richard Edema. 2017. Reaction of introduced Korean rice genotypes for resistance to rice blast in Uganda *Journal of Plant Breeding and Crop Science* Vol. 9(7), pp. 98-105, July 2017.

Emmanuel PM, **Lamo J** and Katuromunda S. 2017 Effect of soil moisture stress duration on the growth characteristics and yield of rice cultivars *International Journal of Plant & Soil* 15(5): 1-10, 2017; Article no.IJPSS.30318 ISSN: 2320-7035. DOI: 10.9734/IJPSS/2017/30318

Jimmy Lamo, PangirayiTongoona, Moussa Sie, Mande Semon, Geoffrey Onaga and Patrick Okori (2017). Upland Rice Breeding in Uganda: Initiatives and Progress, *Advances in International Rice Research*, (EdJinquan Li.), InTech, DOI: 10.5772/66826. ISBN 978-953-51-3010-9, Print ISBN 978-953-51-3009-3, Published: March 15, 2017 under CC BY 3.0 license. Available from: <http://www.intechopen.com/books/advances-in-international-rice-research/upland-rice-breeding-in-uganda-initiatives-and-progress>.

PUBLICATIONS 2018

Otim, M. H., Tay, W. T., Walsh, T. K., Kanyesigye, D., Adumo, S., Abongosi, J., ... Agona, A. (2018). Detection of sister-species in invasive populations of the fall armyworm *Spodoptera frugiperda* (Lepidoptera: Noctuidae) from Uganda. *PLoS ONE*, 14(4), 1–18. <https://doi.org/10.1371/journal.pone.0194571>

Badji, A., **Otim, M.**, Machida, L., Odong, T., Kwemai, D. B., Okii, D., ... Rubaihayo, P. (2018). Maize Combined Insect Resistance Genomic Regions and Their Co-localization With Cell Wall Constituents Revealed by Tissue-Specific QTL Meta-Analyses. *Frontiers in Plant Science*, 9(July). <https://doi.org/10.3389/fpls.2018.00895>

Macfadyen, S., Paull, C., Boykin, L. M., De Barro, P., Maruthi, M. N., **Otim, M.**, ... Omongo, C. A. (2018). Cassava whitefly, *Bemisia tabaci* (Gennadius) (Hemiptera: Aleyrodidae) in East African farming landscapes: a review of the factors determining abundance. *Bulletin of Entomological Research*, 61(02), 1–18. <https://doi.org/10.1017/S0007485318000032>

Otim, M., Kyamanywa, S., Asiimwe, P., & Legg, J. (2018). Development duration, longevity and fertility of *Eretmocerus mundus* Mercet and *Encarsia sophia* (Girault & Dodd) (Hymenoptera: Aphelinidae) on *Bemisia tabaci* (Hemiptera: Aleyrodidae) attacking cassava in Uganda. *Israel Journal of Entomology*, 48(August), 141–155. <https://doi.org/10.5281/zenodo.1344116>

Otim, M., Kyamanywa, S., Ecaat, S., Legg, J., & Gerling, D. (2018). The incidence of *Bemisia tabaci* (Homoptera: Aleyrodidae) and its parasitoids on cassava and associated plants in Uganda. *Israel Journal of Entomology*, 48(August), 157–176. <https://doi.org/10.5281/zenodo.1403999>

Kasozi, L.C., Derera, J., Tongoona, P., Zziwa, S., Muwonge, A., Gasura, E., and Bergvinson, D. 2018. Comparing the Effectiveness of the “weevil warehouse” and “laboratory bioassay” as Techniques for Screening Maize Genotypes for Weevil Resistance. In Press. *Journal of Food Security*, 2018, Vol. 6.

Sserumaga J.P., Dan Makumbi, Marilyn L. Warburton, Stephen O. Opiyo, Godfrey Asea, Abu-Baker Muwonge, and Charles L. Kasozi. 2019. Genetic diversity among tropical provitamin A maize inbred lines and implications for a biofortification program. *Cereal Research Communication* DOI: 10.1556/0806.46.2018.066 DOI: <https://doi.org/10.1556/0806.46.2018.066>

Zziwa, S., **Kasozi, L.C.**, Rubaihayo, P., Muwonge, A. 2018. Gene Action for Grain Yield and Agronomic Traits in Selected Maize Inbred Lines with Resistance to *Striga hermonthica* in Uganda. *Journal of Food Security*, 2018, Vol. 6, No. 4, 155-162.

Zziwa, S., P. Rubaihayo, **L.C. Kasozi**, and A. Muwonge. 2018. Genetic resistance of maize inbred lines to *Striga hermonthica*. *International Journal of Agronomy and Agricultural Research*, Vol. 13, No. 3, p. 46-54.

Sodedji, F.A.K., Kwemoui, D.B., **Kasozi, C.L.**, Asea, G., Kyamanywa, S. 2018. Genetic analysis for resistance to *Sitophilus zeamais* (Motschulsky) among provitamin-A maize germplasm. *Maydica*.

Abera N.M., Odong, T.L., **Kasozi, L.C.**, Edema, R., Gibson, P. and Kwemoui, D.B. 2018. Yield Stability Analysis of Open Pollinated Maize (*Zea mays* L.) and their Top-cross Hybrids in Uganda. *World Scientific News* 95 (2018) 75-88.

Abera, N.M., Odong, T.L, and **Kasozi, L.C.** 2018. Determining the heterotic groups of nineteen open pollinated maize varieties from their top-crosses with inbred line testers. *Journal of Scientific Research & Reports*, 18(1): 1-7, 2018.

Sserumaga J.P., Dan Makumbi, Marilyn L. Warburton, Stephen O. Opiyo, Godfrey Asea, Abu-Baker Muwonge, and Charles L. Kasozi 2019. Genetic diversity among tropical provitaminA maize inbred lines and implications for a biofortification program. *Cereal Research Communication* DOI: 10.1556/0806.46.2018.066 DOI: <https://doi.org/10.1556/0806.46.2018.066>

Sserumaga J.P., Beyene Y., Pillay K., Kullaya A., Oikeh S.O., Mugo S., Machida L., Ngolinda I., Asea G., Ringo J., Otim M., Abalo G., Kiula B. 2018. Grain-yield stability among tropical maize hybrids derived from doubled-haploid inbred lines under random drought stress and optimum moisture conditions. *Crop and Pasture Science* 69:691-702. DOI: <https://doi.org/10.1071/CP17348>.

Yosia Mukasa, Samuel Kyamanywa, Julius **P. Sserumaga**, Michael Otim, VenansioTumuhaise, Mark Erbaugh and James P. Egonyu, 2018. An Atoxigenic L-Strain of *Aspergillus flavus* (Eurotiales: Trichocomaceae) Is Pathogenic to the Coffee Twig Borer, *Xylosandruscompactus* (Coleoptera: Curculionidea: Scolytinae). *Environmental Microbiology Reports*.DOI:10.1111/1758-2229.12705

Michael Hilary Otim, Wee Tek Tay; Thomas K Walsh; Dalton Kanyesigye; Stella Adumo; Joseph Abongosi; Stephen Ochen; Julius P. Sserumaga; Grace Abalo; Godfrey Asea; Ambrose Agona., 2018. Detection of sister-species in invasive populations of the fall armyworm *Spodoptera frugiperda* (Lepidoptera: Noctuidae) from Uganda. *PLOS ONE* 13(4): e0194571. <https://doi.org/10.1371/journal.pone.0194571>

Julius P. Sserumaga^{1*}, Daniel Makumbi², Lee Simyung³, Kiarie Njoroge⁴, James W. Muthomi⁴, George N. Chemining'wa⁴, Godfrey Asea¹, Moses Waswa¹ and Daniel K. Bomet¹ Incidence and severity of potentially toxigenic *Aspergillus flavus* in maize (*Zee mays* L.) from different major maize growing regions of Uganda. <http://www.academicjournals.org/AJAR>

Onaga, G., Nakase, C., Ekobu , M., Lamo,. J., Alibu, S., and Otim, M. *Discladispa armigera*; an emerging insect pest threatening rice productivity in Uganda. *Manuscript being developed for publication in peer reviewed journal*.

PUBLICATIONS 2019

Sserumaga J.P., Dan Makumbi, Marilyn L. Warburton, Stephen O. Opiyo, Godfrey Asea, Abu-Baker Muwonge, and Charles L. Kasozi 2019. Genetic diversity among tropical provitamin A maize inbred lines and implications for a biofortification program. *Cereal Research Communications* Vol. 47, Issue 1, pp. 134-144. <https://doi.org/10.1556/0806.46.2018.066>

Yosia Mukasa, Samuel Kyamanywa, **Julius P. Sserumaga**, Michael Otim, Venansio Tumuhaise, Mark Erbaugh and James P. Egonyu, 2019. An Atoxigenic L-Strain of *Aspergillus flavus* (Eurotiales: Trichocomaceae) Is Pathogenic to the Coffee Twig Borer, *Xylosandrus compactus* (Coleoptera: Curculionidea: Scolytinae). *Environmental Microbiology Reports*. Vol. 11, Issue 4, pp. 508-517. <https://doi.org/10.1111/1758-2229.12705>

Onaga, G., Bigirimana, J., Murori, R., Vera Cruz, C.M., Oliva, R., and Seré Y.A. Importance of Plant Diseases on Rice Production in Africa; In: Rina Opulencia and G.P. Hettel, editors. *Rice Diseases: Biology & Selected Management Practices*; 2019.

