

New Root Crops research publications and proposals June 2017 to date

Manuscripts published

Yada, B., A. Alajo, G.N. Ssemakula, G. Brown-Guedira, M.A. Otema, P.C. Stevenson, R.O.M. Mwanga, and G.C. Yencho. 2017. Identification of simple sequence repeat markers for sweetpotato weevil resistance. *Euphytica* 213:129.

Yada, B., G. Brown-Guedira, A. Alajo, G.N. Ssemakula, E.Owusu-Mensah, E.E. Carey, R.O.M. Mwanga, and G.C. Yencho. 2017. Genetic analysis and association of simple sequence repeat markers with storage root yield, dry matter, starch and β -carotene content in sweetpotato. *Breeding Science* 67:140-150.

Robert Kawuki, G. Adiga, J. Orone, T. Alicai, M. Edimu, T. Omara, A. Pariyo, W. Esuma, C. Omongo, A. Bua, E. Kanju and Baguma Y
Limits of phytosanitation and host plant resistance towards the control of cassava viruses in Uganda. *African Journal of Rural Development*, Vol. 2 (3): 2017 (in press)

Milton O. Anyanga, Benard Yada, G. C. Yencho, Gorrettie N. Ssemakula, Agnes Alajo, Dudley I. Farman, Robert O. M. Mwanga, and Philip C. Stevenson. 2017. Segregation of Hydroxycinnamic Acid Esters Mediating Sweetpotato Weevil Resistance in Storage Roots of Sweetpotato. *Front Plant Sci.* 2017; 8: 1011. Published online 2017 Jun 13. doi: 10.3389/fpls.2017.01011.

Habibu Mugerwa, Susan Seal, Huá-Ling Wang, Mitulkumar V. Patel, Richard Kabaalu, Christopher A. Omongo, Titus Alicai, Fred Tairo, Joseph Ndunguru, Peter Sseruwagi & John Colvin 2018
African ancestry of New World, *Bemisia tabaci*-whitefly species. *Scientific Reports* (in press)

S. Macfadyen, C. Paull, L.M. Boykin, P. De Barro, M.M.N. Gowda, M. Otim, A. Kalyebi, D.G. Vassão, P. Sseruwagi, W.T. Tay, H. Delatte, Z. Seguni, J. Colvin, C.A. Omongo. Cassava whitefly, *Bemisia tabaci* (Gennadius) (Hemiptera: Aleyrodidae) in East African farming landscapes: a review of the factors determining abundance. *Bulletin of entomological research*: doi: 10.1017/50007485318000032

Manuscripts and under preparation;

Ann Ritah Nanyonjo, Florence Kyazze, Robert Sezi Kawuki, Williams Esuma, Enoch Wembabazi, Dominique Dofour, Ephraim Nuwamanya, Hale Tufan. Gender responsive attributes of cassava flour among smallholder farmers in Uganda: a case of Zombo district. *Manuscript under preparation.*

Ephraim Nuwamanya, Harriet Muyinza, Sharon Acheng, Moses Matovu, Evans Atwijukire, Geoffrey Menya, Adebayo Abass. The effectiveness of pruning and waxing on reducing postharvest physiological deterioration in selected local cassava varieties in Uganda. *Manuscript under review IJSciences.*

Evans Atwijukire, Ephraim Nuwamanya, Robert Kawuki, Rose Agwang, Williams Esuma, Joseph Hawumba. Nutritional quality traits of provitamin A cassava (*Manihot esculenta* Crantz) in Uganda

Evans Atwijukire, Joseph Hawumba, Williams Esuma, Enoch Wembabazi, Robert Kawuki, Ephraim Nuwamanya. *Variation in starch quality of carotenoids-rich improved cassava in Uganda*

Evans Atwijukire, Joseph Hawumba, Williams Esuma, Robert Kawuki, Ephraim Nuwamanya. Efficacy of cottage processing methods for cassava (*Manihot esculenta* Crantz) in retaining provitamin A carotenoids and reducing cyanogenic potential

Proposals submitted 1

1. Diversifying and upscaling sweetpotato utilization through development of modern production and processing technologies (Bioinnovate)
2. Cultivate Africa-IDRC

Proposals approved

1. RTB food project

Proposal renewed

1. NEXTGEN cassava

Amount of seed produced

5 acres of about 500 bags

Stakeholders trained

2. 2000 (Seed production, management practices, pests and diseases, value addition)
 3. Over 50 university students for volunteering and internships trained
- Varieties released 5 (NAROSPOT 1 -5)

Any new innovation:

1. Bacterial based modification of starch from cassava. Combination of starch with plant based microfibers to produce bio plastics.

Numbers of Students:

- PhD : 09
- MSC: 16
- Volunteers/Attachments : 30

