

CURRICULUM VITAE

PERSONAL INFORMATION

Name: NYAMWASA INNOCENT



: +250788606454/+8618813119795



: nycent02@yahoo.fr



Sex: Male | **Birthday:** 11/09/1987 | **Birthplace:** Burundi/Mushiha | **Current Residence:** Kigali, Rwanda.

EDUCATION

2016- July 2020: **PhD in microbiology applied to Agriculture and Food safety.**

2013-2016: **Msc in Food, Agricultural entomology and pest management (pest and diseases control)/First Class.** Graduate school of Chinese academy of Agricultural sciences, China. Thesis: First Comprehensive identification of insect pests of Rwanda and their management.

2007-2012: **Bachelor of Sciences with Second Class Upper Division in Agriculture/ Crop Sciences.** National University of Rwanda, Rwanda. Thesis: Assessing the effect resulting from combination of Rhizobium and different fertilizers on bean yield.

1999-2005: High School certificate, College Ingenzi de Rutongo and Group scolaire Saint Andre, Rwanda.

ACADEMIC AWARD

2020: Patent under review (Application of animal manure volatiles into insect pest management)

2019: Publication with applied impact Award, provided by the Institute of plant protection of China.

2016: CAS-TWAS fellowship award, provided by UNESCO and Chinese academy of Sciences.

2013: Cooperation scholarship award, provided by Chinese Government Scholarship.

2007: Rwanda Education Board Bsc Award.

2002: Outstanding student award (at college Ingenzi de Rutongo), provided by First Lady of Rwanda.

RESEARCH FUNDING

2020-2021: **Nyamwasa Innocent**, Alexandre Rutikanga, Noella Karemera. Assessing and analysis of pest control products (Pesticides) management in Rwanda (**Human and food safety Assessment**)

2021: **Nyamwasa Innocent**. 2020. Farming free of pests and diseases in agroforestry systems for improving food security and farmers' resilience to climate change in Rwanda (Under process).

2020: **Nyamwasa Innocent** & Li Kebin . China-Rwanda new technologies demonstration for sustainable development of green agricultural industry (Completed).

2016: Shuai Zhang, Li kebin and **Nyamwasa Innocent**. Elucidating the negative impact of organic farming inputs, and development of new pest control product (Completed).

Peer-Reviewed Journal Articles

1. **Innocent Nyamwasa**, Kebin Li, Shuai Zhang, Jiao Yin, Xiaofeng Li, Jie Liu, Ertao Li, Xiulian Sun. 2020. Overlooked side effects of organic farming inputs attract soil insect crop pests. **Ecological applications**. 2020, e02084. doi:10.1002/eap.2084. (SCI) (IF: 4.248).
2. **Innocent Nyamwasa**, Shuai Zhang, Xiulian Sun, Jiao Yin, Xiaofeng Li, Jinhui Qin, Jin-qiao Li, Kebin Li. 2020. Transition challenge to **organic agriculture**: A course for advancing belowground insect pest management. **Applied Soil Ecology**. 148, 103476. (SCI) (IF: 3.187).
3. **Innocent Nyamwasa**, K. Li, A. Rutikanga, D.N.T. Rukazambuga, S. Zhanga, J. Yin, C. Ya-zhong, X.X. Zhang, X. Sun. 2018. Insect crop pests and their integrated management in East Africa: A review. **Crop protection**. 106: 163–176. (SCI) (IF: 2.381).
4. **Innocent Nyamwasa**, K. Li, J. Yin, S. Zhang, J. Kajuga, A. Hategekimana, B. Waweru & H. Li. 2017. Occurrence of soil insect pests: insight from classical identification supplemented with DNA barcoding. **International Journal of Pest Management**, 63:1, 18-29 (SCI), DOI: 10.1080/09670874.2016.1211771 (SCI journal) (IF: 1. 091).
5. Chao-QunWang, Jin-Qiao Li, Er-Tao Li, **Innocent Nyamwasa**, Ke-Bin Li, Shuai Zhang, Yu Peng, Zhao-Jun Wei, Jiao Yin. 2019. Molecular and functional characterization of odorant-binding protein genes in *Holotrichia oblita* Faldermann. **International Journal of Biological Macromolecules** DOI: <https://www.sciencedirect.com/science/article/pii/S0141813019315387> (SCI) (IF: 5.162).
6. Chengfeng Lei, Shili Yang, Wenxiao Lei, **Innocent Nyamwasa**, Jia Hu, Xiulian. 2019. Displaying enhancing factors on the surface of occlusion bodies improves the insecticidal efficacy of a baculovirus. **Pest Management Sciences (PMS)**. DOI: <https://doi.org/10.1002/ps.5647> (SCI) (IF: 3.75).

7. Zhang XX, Fang C, Liu DD, **Nyamwasa I.**, Zhang S, Jiao Y, Cao Y, Yu HC, Li. 2016. Attractiveness of white grubs to carbon dioxide (Coleoptera: Scarabaeoidea) (二氧化碳对三种蛴螬的引诱作用). Plant protection. 42 (6): 46-50 (Chinese Journal).
8. **Innocent Nyamwasa**, Shuai Zhang, Jiao Yin, Xiulian Sun, Song Li, Kebin Li. 2020. Ecological pest management new option against soil-dwelling insect pest under organic farming (Under review).
9. Li, Er-Tao; Feng, Honglin; Qin, Jianhui; Li, Jinqiao; Li, Xiaofeng; **Nyamwasa, .Er-Tao**Li, Shuai Zhang, Ke-BinLi, **Innocent Nyamwasa**, Jin-Qiao, Li Xiao-Feng, LiJian-Hui, Qin JiaoYin. 2020. Efficacy of entomopathogenic nematode and *Bacillus thuringiensis* combinations against *Holotrichia parallela* (Coleoptera: Scarabaeidae) larvae. Volume 152, January 2021, 104469. (I.F: 2.754).
10. Li, Er-Tao; Feng, Honglin; Qin, Jianhui; Li, Jinqiao; Li, Xiaofeng; **Nyamwasa, Innocent**; Li, Kebin; Yin, Jiao. 2020. Immune-related genes of the larval *Holotrichia parallela* in response to entomopathogenic nematodes *Heterorhabditis beicherriana*. Insect Science (Under review)

CONFERENCE PROCEEDINGS

- 1.Nyamwasa Innocent, Li kebin. Pest management guides of East Africa Pest. CABI. November 2015, Kigali, Rwanda.
- 2.Nyamwasa Innocent, Shuai Zhang. Ovipositionl and crop preferences of insect pests(*Holotrichia parallela*). July 2018, Beijing, China.
- 3.Nyamwasa Innocent, Li Kebin. Role of DNA barcoding in fast species identification. October 2014., Kigali, Rwanda.

SCIENTIFIC REPORTS

- 1.Khanzada, S.R., **Nyamwasa I.**, and Khanzada. 2015. Pest management decision guide: green and yellow list. Maize stem borer. <https://www.plantwise.org/FullTextPDF/2016/20167800044.pdf> (CABI).

2. **Nyamwasa I., Kebin Li.** 2015. *Anomala graueri* voucher R-IPPI cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial. <http://www.ncbi.nlm.nih.gov/nuccore/943580600> (DNA barcoding sequences).

3. **Nyamwasa Innocent, Li kebin .** 2019. Researchers including a Rwandan discovered a new approach to control soil insect pest. Doi (<https://www.igihe.com/amakuru/article/abashakashatsi-barimo-umunyarwanda-bagaragaje-uburyo-bushya-bwo-kurwanya>) (Published in Kinyarwanda language).

4. **Freddy Baijukya, Speciose Kantengwa and Innocent Nyamwasa.** 2012. N2Africa complementing “One Cow for Poor Family” Program in Rwanda. <https://www.n2africa.org>.

OTHER ACADEMIC TRAININGS

1. Food Technology

2. Food and environmental safety management

3. Inspection and registration training on Pest control product management

4. Molecular biology I (Advanced technics): Molecular biology II(Agricultural , crop domestication and germplasm conservation, Plant breeding (Crop improvement I & II; Reverse genetic approaches in plant breeding I&II ; Omics technology in plant breeding I & II)) and developmental biology. Venue: Chinese Academy of Sciences, from 1st September to 27 December 2016.

5. Odorant Binding Protein (OBP) characterization and RNA Interference in Pest Management (Institute of plant protection –Chinese academy of Agricultural sciences (PP-CAAS), 2014-2016.

6. EPN mass production, applications procedures and insect pests rearing. Institute of plant protection –Chinese academy of Agricultural sciences (PP-CAAS), 2014-2016

7. Integrated Pest Management (Prof Dr Stefan Toepfer, CABI Asian), 2015.

8. Experimental design, Statistical analysis in Agriculture research and Data analysis Training

(Prof Dik Babendreier/CABI-Europe, Switzerland), 2014.

WORK EXPERIENCE

2020-2021: Consultancy lead on National assessment of pest control products (Agrochemical pesticides) Management in Rwanda (Supported by Netherland development program, University of Wageningen, RICA and MINAGRI):

Subject covered :

- ✓ Regulatory framework of agrochemical pesticides in Rwanda
- ✓ Identifying legal loopholes
- ✓ Pesticides registration assessment in Rwanda (Purity test , MRL etc..)
- ✓ Inspection process assessment in Rwanda
- ✓ Food safety assessment
- ✓ Environmental assessment

-2021: Visiting Lecturer, University of Rwanda, School of Agriculture and food.

Courses:

- Applied entomology to food and Agriculture (Master and undergraduate program)
- Pesticide Science (Undergraduate program)
- Crop production and pest management (Agroforestry Master program)
- Pest and diseases management(Master Program)

2020: Country Coordinator, China-Rwanda new technology demonstration for Sustainable development of green agricultural industry project.

Feb2016-May 2020: Research Assistant, Institute of plant protection of Chinese Academy of Agricultural Sciences (IPP-CAAS)

Duties:

- Establishment of agronomic fields trials
- Supervising interns and master students
- Project implementation: Three ways ecological interactions: insect-crop-microbial volatiles.

Feb 2013 - July 2016: Research Assistant, Institute of plant protection of Chinese Academy of Agricultural Sciences in collaboration with CABI (Centre for Agriculture and Biosciences International). AGRIT Project implementer on Chinese side.

Duties:

- Molecular taxonomy: identifications of various species.
- Field Inspection
- Field trials of lab results locally and internationally.
- Preparing manuscripts for publications
- Financial reporting of AGRIT project
- Assisting interns

February, 2012 –August 2013: Research Assistant, International center for Tropical Agriculture (CIAT).

Duties:

- N2Africa project field coordinator
- supervising project partners.
- Field trials follow up.
- Analyzing Biological nitrogen fixation results from different trials
- Dissemination of project technology and establishment of field day
- Establishing big fields for variety releases
- Pics bags tests and disseminations for controlling storage insect pests
- crafting reports
- Other routines office works

July 2010 - January 2012: Data collector, a part time job through a joint-action (N2Africa project) between Rwanda Agricultural Board and CIAT.

2006-2007: Teacher of Biology (General Biology and Genetics) and Chemistry,

College Ingenzi de Rutongo.

PROJECT SUPERVISED

2020- to date: Eric Nsengiyumva, Thesis title: Assessing the sustainability of International projects outcome when they are ended (**MSc -in progress**).

2017-2020: Li XiaoFeng, Thesis title. Role of root volatiles into management of root herbivores (**Msc-completed**).

OTHER SOCIAL PUBLICATIONS (POEMS)

1. Ubutwari si umutwaro n'impanga yo kwitanga (Presented at Rwandan Embassy to China on Heroes' celebration day, February 2017, Beijing, China)
2. Nsezerere inyungu nsigarane ubumuntu (Rwandan Embassy to China during celebration of Umuganura, August 2018)
3. Umucengeli yatahuwe atashye (Published in 2019)
4. Muranyobore mutanyobagiza (Published in 2019)
5. Ingengabihe ya muntu iracubangana (Published in 2017)

LEADERSHIP

Sustainable Agriculture and livestock initiative-Rwanda (SALI), Co-funder
Rwanda in your hand Jesus ministry, Founder (established in 2015)

KEY SKILLS: Agriculture, Food Safety, Entomology, pest management, judicious use of pesticides, identification of fake processed food, food borne diseases & insects species identification by using DNA barcoding, expertise in agricultural pest control products use and health effects in Rwanda, expertise use of various facilities for extraction of various compounds such detections of traces of pesticides and detections of volatiles compounds by using GCMS, HPLC,

PORAPAK, SUPER Q, SPME, in addition to skills in using analytical tools namely SPSS, graph prism and SAS.

LANGUAGES: English (IELTS: 6.5), French (National university of Rwanda Exam: 75%), Chinese (Good); Kinyarwanda (mother tongue), Kirundi (Very good).

REFEREES:

1. Ambassador Lt. Gen. Charles Kayonga:

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Telephone: +250788304644

2. Dr. Nyagatare Gullaume, Principal (CAVM)

Tel :250789529484

3. Prof. Qiu Dwen

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Deputy Director of Institute of plant protection of Chinese Academy of Agricultural sciences.

SUPPLEMENT SUPPORTING DOCUMENTS

Kigali, 24th September 2012

TO WHOM IT MAY CONCERN

Re: Recommendation for Mr Nyamwasa Innocent

It is with utmost pleasure that I hereby recommend NYAMWASA Innocent as one of International Center for Tropical Agriculture (CIAT) personnel for your scholarship.

I have known Nyamwasa Innocent since 2010 where he worked as a casual worker in RAB (Rwanda Agriculture Board) through our project Putting Nitrogen Fixation to work with smallholder Farmers (N2Africa). Because of his dedicated attitude towards research work and excellent performance, he was given a two years contract in the same project in February, 2012.

Nyamwasa Innocent is a very hard working young man; his high grades are definitely a result of his focus and dedicated attitude. Furthermore, he is able to work under tremendous pressure and meet deadlines with minimal supervision.

Admitting Nyamwasa Innocent is highly recommended as I am confident that he will work hard and earn his degree in the required time. He will benefit from the scholarship. His acquired knowledge and experience will be a valuable contribution to Research for Development work in Rwanda.

For further information, please do not hesitate to contact me.

Yours sincerely



Prof Wanjiku Chiuri
CIAT Rwanda Site Coordinator



中国农业科学院植物保护研究所

INSTITUTE OF PLANT PROTECTION
CHINESE ACADEMY OF AGRICULTURAL SCIENCES

March, 15th 2019

To whom it may concern

It is my pleasure to provide professional experience for **Nyamwasa Innocent**. Innocent was our personnel in Soil insect pest research group working as paid part-time of 5 hours per day from early February (10th, February 2014-2016 June 30th equal to 2 years) through a collaborative project (AgriTT-RCF 1301 project) with his home country(Rwanda). His main activities include but not limited to soil insect pests molecular identification, pest investigation, as well as financial report writing. Due to his impeccable diligence and performance, we again recruited him in our institute through a joint hand project focusing of elucidating the influence of organic fertilizers on pest attractions under direct supervision of Professor Li Kebin in a renewable period of two years (10th February 2017- 30th June 2019). The job is part time with similar hours as earlier (5hrs/day) totally equal to two years. Throughout our stay with him, we find Innocent as man committed to his work, his indefatigable effort combined with ethic and ability to self-improve , are recipes for his success in near future.

If you have any further question with regard to his background over the last four years, please do not hesitate to contact us.

Sincerely,

Professor QIU DEWEN

Qiu Dewen

Deputy Director of Institute of Plant Protection of Chinese Academy of Agriculture Sciences

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Netherlands
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O/Ref: RW-20/.8.RPG/175
Date: September 9th, 2020

RE: Introduction letter for the Consultancy Team Carrying out the Assignment on the Analysis and Assessment of the Management of Pest Control Products in Rwanda's Horticulture Sector.

Dear Mayor,

SNV, in partnership with IDH Sustainable Trade Initiative, Wageningen University & Research, Agriterro and Holland Greentech, is implementing the HortInvest Project. The 'Investing in Horticultural Development in Rwanda' (HortInvest) is a four year horticultural value chain Dutch funded project implemented in the South-Western Rwanda.

Currently HortInvest is supporting the Ministry of Agriculture and Animals Resources (MINAGRI) in the development of a National Pest Control Products (PCPs) Management Strategy. In order to inform the development of the strategy, a team of consultants lead by Dr. Innocent Nyamwas, supported by Dr. Noella UJ Karemera and Alexandre Rutikanga (here referred as consultants) has been commissioned with an assignment to analyse and assess the current status of management of pest control products in Rwanda's horticulture sector. The consultants will need to gather empirical data on PCPs management in Rwanda through perusing the current regulatory framework whereby they will explore various related documents and discuss with various key stakeholders involved in PCP value chain across Rwanda.

Any facilitation rendered to them in the course of implementing this assignment would highly be appreciated. This assignment will take place between September and December 2020. Do not hesitate to liaise with us for any formal query regarding this supporting letter.

Sincerely,

Bernie F. Chaves
Country Director
SNV Rwanda

Nyamwasa Innocent

nyamwasa