ORCHID: 0000-0001-7052-0210

Position: *Senior Research Scientist*

1. PERSONAL INFORMATION

1.1. NAME: Beryn Otieno
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1.4. EMAIL ADDRESS: botieno@kefri.org
1.5. NATIONALITY: Kenya
1.6. GENDER: Female

2. QUALIFICATIONS

2.1. Academic Qualifications

- 2017 -La Trobe University (Melbourne, Australia), PhD Zoology

- Carried out research and compiled a thesis on 'Genetic and Environmental Influences on Utilization of Eucalyptus camaldulensis (Dehnh.) by Leptocybe invasa Fisher & LaSalle (Hymenoptera: Eulophidae)'. The highlight of the thesis is that galling resistance attributes of E. camaldulensis are mainly chemical manifesting both as constitutive and induced, as governed by location of origin of host plant genotype.

- 2005 -University of Nairobi, Master of Science (Agricultural Entomology)

- Carried out research and wrote a thesis on 'A study of the factors influencing aphids as vectors of viral diseases of Brassica oleracea (kale and cabbage) in Kenya'

- 1999 -University of Nairobi, BSc. Agriculture (Crop protection option), Upper Second Class Honours

2.2. Key Competencies

- Climatic suitability modeling using both multivariate analysis and Maxent
- Enzyme linked immunosorbent assay (ELISA) for diagnosis and detection of plant pathogenic viruses

2.3. Other Courses

- November-December 2011, participated in the Australia Leadership Award Fellowship on 'Community engagement for climate change and renewable energy" at the Queensland University of Technology, Australia.
- June 2010 attended ISTIC Training Workshop on Science, Technology and Innovation (STI) Policy Development: Assessment of Industry Needs, in Kuala Lumpur, Malaysia.
- May 2010 participated in IUFRO workshop on Recognition, Identification and Management of pests and diseases of tropical plantation and forest trees in Kampala, Uganda.
- May 2008 -Attended and participated in the training course on 'Economic analysis of threats posed by Invasive species' organized by the Global Invasive Species Programme in Nairobi, Kenya
- Have practical training on insect identification and pest management (Integrated pest management Levels one and two) by Dudutech (Kenya) Ltd.
- Practical knowledge of isolation, DNA extraction and analysis of insect pathogens, gained at the Horticultural Research Institute (UK).
- 1999- Attended and participated in 'safe use of pesticides' course at University of Nairobi, Upper Kabete Campus.

3. EMPLOYMENT HISTORY

- September 2004 to date –Working with Kenya Forestry research institute (KEFRI) as a Research scientist/entomologist. My duty involves farmer advisory services on insect pest management in forestry, conducting research to find solutions to insect damage to trees and insect identification and damage evaluation & forecasting. I have also been involved in conducting pesticide efficacy trials on behalf of Pest control products board (PCPB) to broaden the pest management options available to farmers.
- July 2003 to September 2004 –Served as a laboratory technician at Dudutech (Kenya) Ltd where I went through numerous training programmes in IPM. My role was isolation and characterization of insect pathogenic viruses for biological control.
- January 2000 to December 2001- Attached at CAB International as a research student while undertaking my MSc.in Agricultural entomology Course.

4. ADMINSTRATIVE RESPONSIBILITY

Assistant Regional Director, LVBERP-Migori

5. PUBLICATIONS

5.1. Journal papers

1. **Otieno, B.A**., Nahrung, H.F. and Steinbauer, M.J., 2019. Where Did You Come From? Where Did You Go? Investigating the Origin of Invasive Leptocybe Species Using Distribution Modelling. *Forests*, *10*(2), p.115.

2. **Otieno, B.A**., 2017. Genetic and environmental influences on utilization of Eucalyptus camaldulensis (Dehnh.) by Leptocybe invasa Fisher & LaSalle (Hymenoptera: Eulophidae). Ph.D. Thesis, La Trobe University, Melbourne, Austria, May 2017. Available online: http://hdl.handle.net/1959.9/563309 (accessed on 22 January 2019).

3. Nyeko, P., Mutitu, K. E., **Otieno, B. O**., Ngae, G. N. and Day, R. K. **2010**. 'Variations in *Leptocybe invasa* (Hymenoptera: Eulophidae) population intensity and infestation on eucalyptus germplasms in Uganda and Kenya', International Journal of Pest Management, 56:2, 137 – 144

4. K. E. Mutitu., **B. O. Otieno.**, P. Nyeko and G. N. Ngae. **2010**. Variability in the Infestation of Leptocybe Invasa (Hymenoptera: Eulophidae) on Commercially Grown Eucalyptus Germplasm in Kenya. In Imo M., Ipara H., Etiegni L., Mulewa C.M., Muisu F, Njiru J.M. and Kirongo, B.B. (eds.) 2010. Natural Resource Management for Improved Livelihoods: Proceedings of the 4th Annual Moi University International Scientific Conference, Eldoret, Kenya, July 29th – 2nd August 2008.

5. **Otieno B**., Mutitu K., Mwangi L. and Minjire. **2009**. Insects pests and diseases associated with Eucalyptus hybrid clones in Kenya: A short communication. Journal of East Africa Natural Resource Management. Vol 3. No.1.

6. Mutitu K.E., Mwangi L., **Otieno B**., and Minjire M. **June 2008**. Pests and diseases associated with Eucalyptus. KEFRI Research Note No 7. Kenya Forestry Research Institute, Muguga, Kenya. 12pp.

7. Nyeko P., K.E.Mutitu, **B. Otieno**, V. Oeba, and R.K. Day. **April 2007**.Farmers' experiences on the *blue gum chalcid, Leptocybe invasa,* and infestation on Euclayptus species in East Africa. Discovery and Innovation Journal, Volume 19 (AFORNET Special Edition No. 4). Pages 277 - 407. African Academy of Sciences, Kenya. pp382 - 388.

8. Mutitu K.E., **B. Otieno**, V. Oeba, P. Nyeko and R.K. Day. **April 2007**. Farmers' knowledge and perceptions on management of *L. invasa* on Eucalyptus species in Western Kenya. Discovery and Innovation Journal, Volume 19 (AFORNET Special Edition No. 4). Pages 277 - 407. African Academy of Sciences, Kenya. pp287 - 293.

9. Mutitu K.E., **Otieno B.O**., Oeba V., Nyeko P. and Day R.K. **April 2007**. Spatial distribution of the *blue gum chalcid, Leptocybe invasa* on Eucalyptus species in Kenya. Discovery and Innovation Journal, Volume 19 (AFORNET Special Edition No. 4). Pages 277 - 407. African Academy of Sciences, Kenya. pp369 - 374.

10. Mutitu K.E, **Otieno B**, Muchiri M. N and Musyoka R. (**2005**) Effects of Leptocybe invasa (Hymenoptera:Eulophidae) attack on different eucalyptus species. In Recent advances in forestry research and technology development for sustainable forest management. Proceedings of the 2nd KEFRI scientific conference 1-4 november 2004, Muguga.

6. RESEARCH

6.1. Completed

Manuscripts in Preparation

OTIENO BA, FARNIER K, TORTO B & STEINBAUER MJ (Under revision)

Olfactory preference and acceptance of subspecies and genotypes of River red gum (*Eucalyptus camaldulensis*) by the invasive galling wasp *Leptocybe invasa*: shoot toughness is more important than antixenosis.

OTIENO BA, SALMINEN J-P & STEINBAUER MJ (under revision)

Resistance of subspecies of *Eucalyptus camaldulensis* to galling by *Leptocybe invasa*: could quinic acid derivatives be responsible for leaf abscission and reduced galling?

OTIENO BA, SALMINEN J-P, OBALLA PO & STEINBAUER MJ (draft)

Subspecies and genotypes of *Eucalyptus camaldulensis* resistant to *Leptocybe invasa* are less galled wherever they are planted.