

## ACADEMIC STAFF PROFESSIONAL PROFILE

### 1. Personal Data

<b>Name: Leonard K. Munga</b>
<b>Title/Qualifications: BVM, MSc, PhD</b>
<b>Department/Unit/Section: Agricultural Resource Management</b>
<b>Contact Address: P. O. Box 43844 – 00100 Nairobi, Kenya</b>
<b>Position: Lecturer</b>
<b>Area of Specialization: Veterinary Epidemiology</b>
<b>Research Interests: Disease resistance in livestock</b>

### 1. Conference Presentations

- Munga, L. K.**, Stevenson P., Mwangi E. and Alushula A. (1990). Differences in susceptibility of three breeds of cattle to trypanosomiasis. *Tenth KEMRI/KETRI Annual scientific Conference*
- Stevenson, P. **Munga, L. K.** Baylis, M., Makumi J. and Alushula (1991). The use of deltamethrin pour-on for tsetse and trypanosomiasis control on ranch cattle in Kenya. *Twenty-first meeting of International Scientific Council for Trypanosomiasis Research and Control. Yamassoukero. Ivory Coast.*
- Stevenson, P. **Munga L.K.** and Dolan R. B. (1993). The detrimental effects of frequent treatment of cattle with trypanocidal drugs. *Proceedings of the Twenty Second meeting of the International Council for Trypanosomiasis Research and Control, 25-29 October, 1993. Kampala, Uganda OAU/STRC Publication no 117.*
- Olaho-Mukani W., Nyang'au, J. Masake A., **Munga, L. K.** and Ndung'u, J.M. The use of Antigen ELISA in evaluation of the efficacy of tsetse control using cypermethrin dip formulation. *Eleventh African Health Sciences Congress.*
- Munga L.K.** Stevenson P. Okech G. and Ndung'u J.M. Establishment and the role of a Technical Team in KETRI. *Paper presented at the Kenya Veterinary Association Annual general meeting and Scientific Conference, 1996. Mombasa, Kenya.*
- Munga L.K.** (1997) The current tsetse and trypanosomiasis situation in western Kenya. *Kenya Veterinary Association Annual General Meeting and Scientific Conference, 1997. Kisumu, Kenya.*
- Dolan, R. B., Alushula, H., **Munga, L. K.**, Mwendia C. Okech G. Sayer P. D. Stevenson P. Baker R.L. and Magadi M. (1994). The Orma Boran – Ten Years of field observations. In Rowlands G. J. and Teale, H. J. (eds) 1994. *Towards increased use of Trypanotolerance: Current research and Future Directions. Proceedings of workshop organised jointly by ILRAD/ILCA. 26-29 April 1993. ILRAD/ILCA, Nairobi, Kenya.*
1. Trypanocidal drug resistance in Tanzania Mwambo H., Ndung'u, J. M., Murilla, G.A., **Munga, L.K.**, Sinyangwe, L., Holmes P.H. and Eisler, M.C. (1999). *Proceedings of the*

*Twenty-fifth Meeting of the International Council for Trypanosomiasis Research and Control, 1999. Mombasa Kenya, OAU/STRC Publication no 120: p 168-174.*

2. Orengo, O., Kimwele, C.N., Kemp, S.J., Korol, A.B., **Munga, L.K.**, Murilla, G., Hanotte, O. and Soller, M, 2009. Effect of N'Dama origin marker alleles on trypanotolerance in a backcross cattle population under natural tsetse and trypanosomosis challenge. *In: Proceedings of the 30th ISCTRC Conference held in Kampala, Uganda.* pp. 125
3. Orengo, C.O., Korol, A ., Kimwele, C. N., Kemp, S., Hanotte, O., **Munga, L.K.**, Gibson, J.P., Murilla, G. and Soller, M., 2007. Detection of Quantitative Trait Loci (QTL) controlling trypanotolerance in a backcross of (N'Dama X Kenyan Boran) X Kenyan Boran cattle population under a natural tsetse and trypanosomosis field conditions in Narok District (Kenya). *In: ISCTRC conference, 30 September – 6 October 2007. Luanda, Angola.*

## 2. Research

A genomic approach to improved trypanotolerance in cattle

Tsetse control technology transfer between KETRI, DFID-UK, ITDG, KEPDA and Three Rural Communities in Kenya.

Evaluation of the efficacy of Cypermethrin dip formulation (Ectomin™) against tsetse and trypanosomiasis in the Coast Region of Kenya.

Evaluation of the efficacy of alpha-cypermethrin 1,5% pour-on (Renegade™) against tsetse flies and livestock trypanosomiasis in Kenya

Evaluation of the efficacy of new deltamethrin-based insecticide formulation (Butox™ and Delete™ Deltab™) against tsetse and trypanosomiasis in Kenya

The efficacy of  $\alpha$ -cypermethrin 5% E.C. (Renegade 50™ Spray) against tsetse and trypanosomiasis in cattle in a community ranch in Narok, South West Kenya

Studies on the isometamidium toxicity in cattle

## 3. Funded projects

## 4. Publications

1. Eisler, M. C., Stevenson, P., **Munga, L. K.** and Smyth, J.B.A. (1997). Concentrations of isometamidium chloride (Samorin<sup>®</sup>) in sera of zebu cattle which showed evidence of hepatotoxicity following frequent trypanocidal treatments. *Journal of Veterinary Pharmacology and Therapeutics*. **20**(3): 173-180.
2. Njagi, O.N., Ndarathi, C. M., Nyaga, P.N. and **Munga, L.K.** (1998). An epidemic of Besnoitiosis in cattle in Kenya. *Onderstepoort Journal of Veterinary Research* **68**:133-136.
3. Stevenson, P., Rossiter, P.B., **Munga, L.K.**, Ndung'u E.K. and Dolan R.B. (1999). Rinderpest vaccination and the incidence and development of trypanosomosis in cattle. *Tropical Animal Health and Production*. **31**:65-73
4. Wesonga, J.O., Chemuliti, J., Wesonga, F.D., Wanjala K., **Munga, L. K.**, Ngare P and Murilla, G. A. (2005) Prevalence of parasitic infections in small ruminants in a pastoral community in Narok District, Kenya. *Bulletin of Animal Health and Production in Africa* **53**: 218-255
5. Wesonga, F. D. Wesonga, J. O., Chemuliti, J., Wanjala, K., **Munga, L.** and Gitau, P. (2006). Seroprevalence of Ehrlichia ruminantium (Heartwater) in small ruminants in a

pastoral production system in Narok district, Kenya. *Bulletin of Animal Health and Production in Africa* **54**: 23-33

**5. Consultancy and community service**

Board Member, Wangungu High School, Kiambu County

**6. Affiliation to Professional Bodies**

Registered by the Kenya Veterinary Board, Membership No 959

**7. National and International awards and Recognitions**

**8. External Examination (if any)**

**9. Supervision of postgraduate students (if any)**

**10. Patents (if any)**

**4. Administrative positions held to date**