

CURRICULUM VITAE

NAME: Charles Karuku Gachuri

ADDRESS: Department Of Animal Production
University Of Nairobi
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DATE OF BIRTH: 28TH March 1960

NATIONALITY: Kenyan

EDUCATIONAL BACKGROUND:

Institution	Dates	Qualification
University of Nairobi	1979-1984	Bachelor of Vet Med
University of Nairobi	1985-1988	MSc (Animal Science)
University of California, Davis	1988-1993	Doctor of Philosophy (Animal Nutrition)

WORK EXPERIENCE:

TEACHING: *University of Nairobi*

2005-Current

Associate Professor

Teaching undergraduate and post-graduate students.

- Basic animal nutrition
- Livestock production systems
- Dairy cattle nutrition and management
- Sheep and Goat nutrition and management
- Beef cattle nutrition and management
- Camel nutrition and management
- Energy and protein metabolism
- Techniques of feed evaluation
- Animal feed formulation and manufacturing
- Pasture and fodder production
- Integrated Resource management
- Modeling livestock production systems

-Supervision of post-graduate students

1998-2005- Senior lecturer

July 2017

1988-1998- Lecturer
1984-1988- Assistant lecturer

SUPERVISION OF POSTGRADUATE STUDENTS

Msc Thesis:

Mbuthia, E.M.

Evaluation of different methods of preservation of surplus bovine colostrum and its use for feeding preweaning dairy calves in small dairy farms in Kenya. (Graduated)

Kinuthia, M.

The productive performance of the local dairy goat crosses and their Alpine sired crossbreeds in small holdings in Central Kenya. (Graduated)

Munene, G.

Evaluation of mineral status in small holder dairy farms in Githunguri and Kinangop divisions of Central Kenya. (Graduated)

Odoi, A.

Effects of helminthiasis on the production of small ruminants on smallholder mixed farms in Kiambu district, Kenya. (Graduated)

Biwott, K.J.

The effects of allocating dairy concentrate supplementation during different phases of lactation of lactation curve. (Graduated)

Muli, A.N.

Effects of dairy watering systems and regimes on DM intake and milk production in Kiambu district, Kenya. (Graduated)

Wambugu, M.N.

Extension and its effect on dairy cattle nutrition and productivity in smallholder dairy enterprises in Kiambu district. (Graduated)

Woyengo, T.A

Effect of Protein supplementation and Urea Treatment on Utilization of Maize Stover in Red Maasai Sheep (Graduated)

Nyabende, B.O.

The effect of feeding fluctuating basal diet of barley straw and napier grass on rumen function. (Graduated)

Situma Gladys A.

Effect of Sugar cane molasses on the Quality of Napier grass silage. (Graduated)

July 2017

Barorot, Tabitha

Effect of poultry waste, mulberry foliage, chopping length and organic acids or mollasses on fermentation characteristics and nutritive value of napier silage (Graduated)

Katiku P.N.

Application of livestock models to assess dairy cattle feeding strategies and its impact on farmers' livelihoods. (Graduated)

Lengarite Moses.

Evaluation of mineral status of small ruminants in Marsabit south district (Laisamis) of northern Kenya (Graduated)

Yohana M.

Effect of feed enzymes and energy availability on broiler chicken (*gallus domesticus*) performance in Kenya (Graduated)

Manoa, L.

Evaluation of dry matter yields and silage quality of six sweet-potato varieties. (Graduated)

Kiragu A.

Performance of pigs reared on sweet-potato silage in central Kenya (Graduated)

Serem, J.K.

Characterization of rabbit production systems in Kenya. (Graduated)

Wanjala, Faustine N.

Assessment of performance indicators of different rabbit breeds under intensive and semi intensive production systems. (Graduated)

Githui, Patrick M.

Effect of stage of growth on nutritional value of dual purpose sorghum (Graduated)

Korir D.K.

'Effect of feeding systems on environmental nitrogen contamination by Boran and Friesian cattle' (Graduated)

Niyireba, R.T.

Screening Sweet Potato (*Ipomoea batatas*) for Biomass Production and their potential as dual Purpose in Eastern Rwanda (In progress)

Towet, Joseph

Evaluation of nutritive value, production and conservation of locally available forages as rabbit feeds. (In progress)

Rukundo Jean de Dieu

Assessment of productive and reproductive performance of cows under Girinka 'one

July 2017

cow' program in northern Rwanda (in progress)

Onsongo, Victor

Effect of inclusion of black soldier fly (*Hermetia illucens*) larvae and silk worm (*Bombyx mori*) pupae meals in broiler diets on growth performance and meat quality (in progress)

Jasinta Mamur Bako

Effects of feeding malted sorghum on performance of broiler chickens (in progress)

Sebastian Kironji Waruri

Comparative performance of zebu and sahiwal bulls on a semi-feed lot finishing and traditional ranching system (in progress)

Mbithi Andrew Muthama

Effects of optimal and suboptimal feeding on digestibility, nitrogen balance and methane emissions in boran steers. (in progress)

PhD Thesis.

Kariuki, J.N.

Potential and limitation of rearing dairy replacement heifers on napier grass on the Kenyan highlands. (Graduated)

Mbuthia, E.W.

Effect of inclusion of high protein forage legumes and molasses in napier grass silage on silage quality and performance of sahiwal heifers (Graduated)

Kuria, S.G.

Mineral supplementation in the home based milking camel herds: A diagnostic study in the Rendille area of Marsabit district, Kenya (Graduated)

Kinuthia, M.N.

Evaluation of leguminous shrubs as supplementation of feed in dairy goat production (Graduated)

Mburu, L.M.

Effect of seasonality of feed resources on dairy production in coastal lowlands of Kenya. (Graduated)

Sikumba Gregory

Strategic lesson learning on dairy feeding technologies for improved feed supply and adoption of existing feeds in Tanzania. (In progress)

Mwasemu, Ezekiel B.

Effects of applying exogenous amylase and xylanase enzymes to cassava based calf starter diet on rumen development and growth of dairy calves. (In progress)

July 2017

Odero, Jane

Evaluation of performance of Kenyan indigenous chicken fed diets with probiotic treated *prosopis juliflora* pods (in progress)

Gakige, Jesse

Use of sweet potato vine silage to improve small holder dairy productivity. (In progress)

Kibegwa, Felix M.

Metagenomic analysis of dairy cattle rumen microbiota: Changes in rumen microbial diversity under varying small holder feeding systems and its effects on productivity. (In progress)

COURSES ATTENDED:

Economics of animal health and disease control. 1987. International Livestock Center for Africa, Addis Ababa, Ethiopia.

International course in dairy cattle feeding and management. 2005. Tel Aviv, Israel.

Use of PC-Dairy software for formulation of cattle feeds. 2006. Land O'Lakes Kenya office.

Assessing year-round feeding strategies in mixed crop-livestock systems: Incorporating sweet potatoes into animal feed. 2010. International Livestock Research Institute, Nairobi Kenya.

RESEARCH:

Causes and factors affecting mortality levels in small east African goats in the range areas. MSc dissertation

Use of high energy diets in dairy cattle to improve milk yield. PhD dissertation.

Development of feed supplementation strategies for improving the productivity of dairy cattle in small-holder farms in Kenya. (Funded by the International Atomic Energy Agency)

Involved in a multidisciplinary research project: Genetic studies of Galla and East African Goats and their correlated growth and reproduction under different nutritional levels and haemonchus challenges at Machang'a, Embu. (Funded by International Livestock Centre for Africa)

July 2017

Use of treated crop residues to improve productivity of dairy cattle in Nyanza, Rift Valley and Central Provinces of Kenya. (Funded by Agricultural Research Fund.)

Conservation of silage for smallholder dairy farmers. (Funded by International Foundation for Science)

Study on camel mineral supplementation strategies in Marsabit district. (Funded by European Union.)

Incorporation of sweet potato vines and roots into animal feeds (In collaboration with International potato centre). Funded by Bill-Mellinda Gates Foundation.

Strategies to promote the rabbit value chain in Kenya. Funded by National Council for Research and Technology.

COLLABORATIVE RESEARCH

National Feed resource mapping and database development (KARI- National Animal Husbandry Research Station (Naivasha), funded by Kenya Agricultural Productivity Project (KAPP).

Development and promotion of home made ration formulation for optimal dairy cattle production in high potential areas (KARI- National Animal Husbandry Research Station (Naivasha), funded by Kenya Agricultural Productivity Project (KAPP).

Establishment of a feed resources database for East and central African countries. Funded by ASARECA. (In collaboration with Egerton University-Department of Animal science).

Development of 'Early-Calves'-weaning Diets and Densified-Total-Mixed Rations for Enhancing Dairy Productivity and Commercialization in Kenya (In collaboration with KARI- Muguga)

EXTENSION:

Member of a project on the use of radio broadcasts to disseminate livestock and crop production technologies to farmers. Involves developing radio programs on various aspects of production. (Funded by IDRC and Ford Foundation).

Advise farmers on livestock feeding, management practices and disease control.

Training of feed millers and farmers on techniques of feed formulation

July 2017

PUBLISHED MANUALS:

Rearing of Dairy Cows 2002. C.K. Gachuri. Published by Radio Listening Groups.

Training Manual for small scale feed manufacturers P.N. Mbugua and C.K. Gachuri. 2004. Sponsored by Kenya Maize Development Program.

Feeding of dairy cattle in East Africa, B. Lukuyu, C. Gachuri, M. Lukuyu, C. Lusweti and S. Mwendia. ISBN:92-9146-272-1. Sponsored by East African Dairy Development Project

Dairy Farmers Training Manual. Sponsored by KDSCP- Land'O'Lakes

EDITED BOOKS

Cow signals, The basics : East African edition
Cow signals, Advanced East African Edition

CONSULTANCY:

World Food Programme:

Training of World Food Programme field Personnel based in Sudan on the evaluation of animal productivity.

Hoechst E.A. Ltd

Evaluation of the extent of use of feed additives in the animal feed industry in Kenya.

Monks Medicare Africa Ltd

Formulation of rations for commercial feeds

Stockplan Ltd

Formulation of high protein concentrates for lactating dairy animals

Land O'Lakes, Inc

Baseline survey of dairy marketing cooperatives in groups in four districts in Kenya.

Macheo Ltd

Evaluation of productivity of a large dairy herd in Kitale, Kenya.

ABS Ltd

Training AI technicians on dairy cattle feeding

July 2017

Kenya Maize Development Program
Development of 'Training Manual for small scale feed manufacturers' P.N. Mbugua and C.K. Gachui. 2004.

Land O'Lakes Inc
Training extension staff, dairy cooperative members and farmers on use of computer software (PC Dairy) in formulation of dairy cattle rations

Setpro Consultants Ltd
Training of dairy value chain players on dairy cattle management and feeding (2009)

LandO'Lakes Inc
Preparation of National Dairy Master Plan (2009-2010)

East African Dairy development Project (EADD) (2010)
Development of a 'Manual on Feeding of dairy cattle in East Africa' –Team leader.

LandO'Lakes Inc (2010-2011)
Capacity building for Kenya Association of Feed Manufacturers -Preparation of animal feeds manual.

LandO'Lakes Inc (2011)
Development of 'Dairy Farmers Training Manual'

Kenya Industrial Research and Development Institute (KIRDI).
Training farmers and feed manufacturers on 'Animal feeds formulation and preparation'

East African Dairy development Project (EADD) (2012)
Cost benefits analysis of introduced pasture and fodder crops in selected areas in Rift Valley and Central Kenya.

Regional strategic analysis and knowledge support system (ReSAKSS). (2012)
Review of a Synthesis Report on "Technologies for Enhancing the Productivity of Dairy Cattle in Western Kenya"

East African Dairy development Project (EADD) (2013)
Preparation of resource manual to document experiences on ' The Dairy Hub approach to improving milk productivity in small holder farms'

Animal Feed formulation course: offered every year for a period of five days to farmers and upcoming feed manufactures'. June 2013. Kenya Industrial Research and Development Institute

Training of members of Dairy Cooperatives societies on 'Increasing clean milk production'. August 2013- Current. Supported by SNV-Netherlands through the Kenya Market Oriented Dairy project.

July 2017

Training of staff of Lower Eastern Dairy Cooperatives in feed formulation and feedmill management. Sponsored by USAID-Fintrac through KAVES project. August 2015.

Use of hydroponic fodder in Kenya: Challenges and opportunities. Sponsored by USAID-Fintrac through KAVES project. August 2015.

NATIONAL SERVICE

Served as member of 'Technical Committee on Standardization of animal feeds, Kenya Bureau of Standards'.

UNIVERSITY RESPONSIBILITIES

Head, Animal Nutrition Section – Department of animal production.
Member, curriculum development committee, Faculty of Veterinary medicine.
Faculty member Incharge, Animal nutrition laboratory

PUBLICATIONS

CONFERENCE PAPERS

Published Proceedings

1. Carles, A.B., **Gachuri, C.K.** and Schwartz, H.J. 1987. Mortality levels and causes in a herd of Small East African goats on a semi-arid thornbush savannah. *Proceedings of the Fourth Conference on goats*, Brasilia, Brazil. International Goat Association.
2. **Gachuri C.K.**, Carles A.B. and Schwartz, H.J. 1987. Factors affecting survival in adult does on a semi arid thornbush savanna at Isiolo. Proceedings of the KVA/ SR-CRSP Kenya workshop, Nairobi.
3. Carles, A.B., **Gachuri, C.K.** and Schwartz, H.J. 1987. A comparison of goat mortality of two herds at Rendille and Isiolo. Proceedings of the KVA/ SR-CRSP Kenya workshop, Nairobi.
4. Munene, J.N., Kariuki, D.I., Munyua, S.J.M., **Gachuri C.K.** and Wahome, R.G. 1987. Incidence and cost of mastitis in Kenya : Projections from Kabete area. Paper presented at the Animal Production Society of Kenya symposium. Nairobi, Kenya.
5. **Gachuri, C.K.** 1987. Factors affecting mortality in free ranging Small East African goats. MSc thesis, University of Nairobi.
6. Carles, A.B., **Gachuri, C.K.** and Schwartz, H.J., 1988. A comparison of goat mortality in two pastoral herds in northern Kenya. In: P. Singh, V. Shankar and A.K. Srivastava (Eds), *Abstracts of the 3rd International Rangeland Congress*, Range Management Society of India, Jhansi, pp. 440-442.

July 2017

7. **Gachui, C.K.** 1993. Effect of supplemental dietary fat on rumen fermentation, nutrient flow to the duodenum, milk yield and composition in lactating dairy cows. Doctoral thesis, University of California.
8. Osolo, K., M.M. Wanyoike, **C.K. Gachui**, R.N. Kinuthia, A.M. Okeyo and M. Okomo. 1995. Botanical and chemical composition and dietary selection of forages at Machang'a, Embu. Paper presented at the Animal Production Society of Kenya Annual Symposium held on 19-22 Feb, 1995, Nanyuki, Kenya.
9. Okeyo, A.M., B.A.O. Inyangala, N.E. Maingi, S.M. Githigia, S.J.M. Munyua, M.M. Wanyoike, **C.K. Gachui**, R.N. Kinuthia, M. Okomo and K. Osolo. 1994. Genetic studies of Galla and Small East African goats and their correlated growth and reproduction performances under different nutritional levels and endoparasite challenges. *Technical report presented at the 3rd Biannual SRNET conference, 5th-9th Dec 1994, Kampala, Uganda.*
10. Mbugua, P.N. and **C.K. Gachui**. 1998. Livestock production in Nyanza Province: Dairy Production. Paper presented to Nyanza Provincial Agricultural Board, Migori. June 1997.
11. Kariuki J.N., Gitau, G.K., **C.K. Gachui**, S. Tamminga and J.M.K. Muia. 1998. The effect of supplementing napier grass with graded levels of desmodium on intake and rumen fermentation in steers. *Proceedings, 6th KARI Scientific conference, November, 1998. Kenya Agricultural Research Institute, Nairobi, Kenya.*
12. T.A. Woyengo, **C.K. Gachui**, R.G. Wahome and P.N. Mbugua. 2004. Economic evaluation of increasing the energy value of *Zea mays* stover by urea treatment.. Proceedings of the 9th Biennial KARI Scientific Conference
13. **Gachui C.K.** 2004. Feeding dairy goats on local feed resources. Proceedings of 5th Biennial Eastern Africa Goat Development Network. Meru, Kenya.
14. Manoa L., **C. Gachui**, B. Lukuyu, J. Wamatu, S. Agili, J. Maina. 2011. Response of Sweetpotato Dual Purpose Varieties to Harvesting Regime. aGRO 2011 – 1st Biennial Conference of the Faculty of Agriculture, University of Nairobi, 26th to 28th September 2011
15. Lukuyu, B., J. Kinyua, S. Agili, **C. Gachui** and J. Low. 2011. Effects of -pre-screened sweet potato germplasm for biomass production under different cropping regimes and their potential as dual purpose varieties in Kenya. In: Challenges and opportunities for agricultural intensification of humid subsystems of sub-Saharan Africa.
16. Katiku, P. N, Gachui, C. K. and Mbugua, P. N. 2012. Bio-economics of stall managed dairy cattle feeding regimes in Mbeere district of eastern Kenya. Presented during the 13th KARI biennial conference, October 22-26, 2012
17. Katiku P N, Gachui C K, Mbugua P N, and Kimitei R K. 2013. The potential quality, mode of feeding and constraints of feedstuffs in Mbeere District of Eastern Kenya. Presented at **July 2017**

APSK symposium held at Golf Hotel in Kakamega.

REFEREED JOURNALS

1. **Gachuri, C.K.**, Wahome, R.G. and Carles, A.B. 1988. Reproduction levels of the Small East African goat under range conditions. *The Kenya Veterinarian*, 12:35-36.
2. **Gachuri, C.K.**, E.J. DePeters and R.A. Zinn. 1992. Effects of feeding supplemental fat (yellow grease) to lactating cows on milk composition and diet digestibility. *J. Dairy Sci.* 75:171.
3. **Gachuri, C.K.** and E.J. DePeters. 1993. Effects of feeding supplemental fat on ruminal fat metabolism, biohydrogenation and digestibility of fatty acids by lactating dairy cows. *J. Dairy Sci.* 76:abs.
5. Mbutia, E.M., **C.K. Gachuri**, A.A. Abate, J.W. Kiragu and D.I. Kariuki. 1996. Sahiwal calf performance on colostrum preserved by different methods. *Bull. Anim. Hlth. Prod. Afri.* 46:63-64.
6. Mbutia E.M., **C.K. Gachuri**, F. Klobasa and A.A. Abate. 1997. Effect of treatment with formaldehyde and formic acid on immunoglobulin content of stored bovine colostrum. *Anim. Feed Sci Tech.* 67:4 291-298
7. **Gachuri, C.K.**, R.G. Wahome, P.N. Mbugua, M.M. Wanyoike, J.M.Z. Kamau and S.J.M. Munyua. 1998. Performance of dairy animals under two zero grazing systems in Kiambu and Nyandarua districts. *The Kenya Veterinarian* 23:180-182
8. Muli, A.N., **C.K. Gachuri**, R.G. Wahome and J. Tanner. 1998. Effects of water sources and watering frequency for dairy cattle on water offered and milk production in Kiambu district. *The Kenya Veterinarian* 23: 208-211.
9. Wambugu. M, R.G. Wahome, **C.K. Gachuri** and J. Tanner. 1998. Evaluation of the use of milk urea nitrogen (MUM) as an indicator of nutritional status of dairy cattle in small holder farms in Kiambu district. *The Kenya Veterinarian* 23:152-154.
10. Wambugu. M, R.G. Wahome, **C.K. Gachuri** and J. Tanner. 1998. Delivery of technical information to smallholder dairy farms in Kiambu district. In: Advances in Veterinary Education and Animal Sciences: *The Kenya Veterinarian* 23:160-162
11. Odoi, A., J.M. Gathuma, **C.K. Gachuri**, A. Omore, T. Gitau and S.W. Wanyangu 1998. Constraints to small ruminant production in smallholder farms in Kiambu district, Kenya. *The Kenya Veterinarian* 23:191-195.
12. Kinuthia, M.N., J.W. Wakhungu, M.M. Wanyoike and **C.K. Gachuri**. 1998. Milk production performance of dairy goat crosses on smallholdings in central Kenya. *The Kenya Veterinarian* 23:196-198.

July 2017

13. Kariuki J.N., **C.K. Gachuri**, G.K. Gitau, S. Tamminga, J. Van Bruchen, J.M.K. Muia and K.R.G. Irungu. 1998. Effect of feeding Napier grass, lucerne and sweet potato vines as sole diets to dairy heifers on nutrient intake, average dairy gain and rumen degradation. *Livestock Production Science* 55:13-20.
14. Kariuki J.N., G.K. Gitau, **C.K. Gachuri**, S. Tamminga, K.R.G. Irungu and J.M.K. Muia. 1999. Effect of maturity on the mineral composition of napier grass. *Trop. Sci.* 39:56-61.
15. Kariuki J.N., S. Tamminga, G.K. Gitau, **C.K. Gachuri**, J. Van Bruchen and J.M.K. Muia. 1999. Performance of Sahiwal and Friesian heifers fed on napier grass supplemented with graded levels of lucerne. *S. Afri. J. Anim. Sci.* 29:1-11.
16. Kariuki, J.N., G.K. Gitau, **C.K. Gachuri**, S. Tamminga and J.M. Muia. 1999. Feeding behaviour of sahiwal and friesian cattle under zero grazing system in a tropical climate. In D. van der Heide, E.A. Huisman, E. Kanis, J.W.M. Osse and M.W.A. Verstegen (Eds). Regulation of Feed Intake. C.A.B. International, Wallingford pp. 215-218.
17. Kariuki J.N., **C.K. Gachuri**, S. Tamminga, G.K. Gitau, J. Van Bruchen and J.M.K. Muia. 1999. Effect of supplementing napier grass with desmodium and lucerne on DM, CP and NDF intake and weight gains of growing heifers. *Livestock Production Science.* 60:81-88.
18. **Gachuri, C.K.** and R.G. Wahome. 2001. Total mixed rations versus traditional feeding in dairy. Which way to go? *The Kenya Veterinarian* 21:12-15.
19. Kaitho, R.J., Biwott, K.J, **C.K. Gachuri**, R.G. Wahome and J. Tanner. 2001. Effects of allocation of fixed amounts of concentrate on milk yields and of dairy cows. AGRIPPA-Peer reviewed electronic journal. <http://www.fao.org/agrippa/agrippa-main.asp>.
20. Kariuki, J.N., S. Tamminga, **C.K. Gachuri**, G.K. Gitau and J.M. Muia. 2001. Intake and rumen degradation in cattle fed napier (*Pennisetum purpureum*) supplemented with varying levels of *Desmodium intortum* and *Ipomea batatus* vines. *South African J Anim Sci* 31:151-159.
21. Mbuthia, E.M., **C.K. Gachuri** and A.A. Abate 2002. Chemical evaluation of bovine colostrum preserved by different methods in a hot climate. *Indian Journal of Animal Sciences* 72:341-345.
22. Mbuthia, E.M. and **C.K. Gachuri**. 2003. Effect of inclusion of *Mucuna pruriens* and *Dolicchos lablab* forage in napier grass silage on silage quality and on voluntary intake and digestibility in sheep. *Tropical and Subtropical Agroecosystems* 1: 123-128.
23. Woyengo, T.A., **C.K. Gachuri**, R.G. Wahome and P.N. Mbugua. 2004. Effect protein supplementation and urea treatment on utilization of maize stover in Red Maasai sheep. *South African J Anim Sci* 34:23-30.
24. Kuria, S.G., M.M. Wanyoike, **C.K. Gachuri** and R.G. Wahome. 2004. Indigenous
July 2017

camel mineral supplementation knowledge and practices on manyatta based camel herds by the Rendille pastoralists of Marsabit district, Kenya. *Livestock Research for Rural Development Vol 16*.

25. Kuria, S.G., R.G. Wahome, **C.K. Gachuri** and M.M. Wanyoike. 2004. Evaluation of forages as mineral sources for camels in Western Marsabit, Kenya. *South African J Anim Sci 34:180-188*

26. Kuria, S.G., **C.K. Gachuri**, M.M. Wanyoike and R.G. Wahome. 2004. Effect of mineral supplementation on milk yield and calf growth of camels in Marsabit of Kenya. *Journal of Camel Practice and Research 11:87-96*.

27. Kuria, S.G., M.M. Wanyoike, **C.K. Gachuri** and R.G. Wahome. 2005. Nutritive value of important range forages species for camels in Western Marsabit, Kenya. *Tropical and subtropical ecosystems. 5:14-24*.

28. Kuria, S.G., M.M. Wanyoike, **C.K. Gachuri** and R.G. Wahome. 2006. Effect of mineral supplement on plasma minerals concentration of camels (*Camelis dromedalis*) in Kenya. *Int. J. Agric. Biol. 8:168-171*.

29. Kuria, S.G., **C.K. Gachuri**, M.M. Wanyoike and R.G. Wahome 2006. Mineral profile in plasma of free ranging camels. *Indian J of Animal Sciences 76:1068-1070*

30. Kuria, S.G., **C.K. Gachuri**, M.M. Wanyoike and R.G. Wahome. 2006. Use of linear body measurements in estimating live weight of camel calves in Kenya. *Journal of Camel Practice and Research 14:21-25*.

31 Odoi, A., Gathuma, J.M., **Gachuri, C.K.**, and Omore A. 2007. Feeding practices and effects of gastrointestinal parasite infections on live weight gain of small ruminants in smallholder mixed farms in Kenya. *BMC Veterinary Research 2007 3:6*

32. Kinuthia M N, Wanyoike M M, **Gachuri C K** and Wakhungu J W. 2007 Effect of supplementing weaner goats with graded levels of *Calliandra calothyrsus* and Lucerne (*Medicago sativa*) on feed intake and weight gain. *Livestock Research for Rural Development Volume 19, Article # 115*

33. Muia J M K, Kariuki J N, Mbugua P N, **Gachuri C K**, Lukibisi L B, Ayako W O and Ngunjiri W V 2011. Smallholder dairy production in high altitude Nyandarua milk-shed in Kenya: Status, challenges and opportunities. *Livestock Research for Rural Development. Volume 23, Article #108. <http://www.lrrd.org/lrrd23/5/muia23108.htm>*

34. Katiku P N, **Gachuri C K** and Mbugua P N 2011. Characterization of dairy cattle farming in Mbeere District of Eastern Kenya. *Livestock Research for Rural Development. Volume 23, Article #236. <http://www.lrrd.org/lrrd23/11/kati23236.htm>*

35. M.I. Lengarite, P.N. Mbugua, **C.K. Gachuri** and L.W. Kabuage. 2012. Mineral Status of Sheep and Goats Grazing in the Arid Rangelands of Northern Kenya. *Pakistan Journal of Nutrition 11:383-390*.

July 2017

36. Lengarite M I, Mbugua P N, **Gachuri C. K.** and Kabuage L. W. 2012: Herders' knowledge on mineral nutrition and implication on sheep and goat productivity in Marsabit South District, Kenya. *Livestock Research for Rural Development*. Volume 24, Article #57. <http://www.lrrd.org/lrrd24/4/leng24057.htm>
37. Migwi P K, Bebe B O, **Gachuri C K**, Godwin I and Nolan J V 2013: Options for efficient utilisation of high fibre feed resources in low input ruminant production systems in a changing climate: A review. *Livestock Research for Rural Development*. Volume 25, Article #87. <http://www.lrrd.org/lrrd25/5/migw25087.htm>
38. Serem J K, M M Wanyoike, **C K Gachuri**, S K Mailu, P K Gathumbi, R N Mwanza, N Kiarie, D K Borter. 2013. Characterization of Rabbit Production Systems in Kenya. *J. Agric. Sci. Appl.* Volume 2, Issue 3. 155-159 www.j-asa.org
39. Niyireba, T.N., C. Ebong, B. Lukuyu, J. Kirui, J. Ndirigwe, G. Uwimana, L. Kakundiye, M. Mutimura, D. Kahakwa and **C.K. Gachuri**. 2013. Evaluation of Dual purpose sweet potato (*Ipomea batatus L.*) cultivars for root and fodder production in Eastern Province, Rwanda. *Agricultural Journal* 8: 242-247
40. Katiku P. N., Mbuku S. M., **Gachuri C. K.**, Mbugua P. N. and Kimiti R. K. 2014. Utilization of LIFE-SIM as a Management Decision Support Tool for Smallholder Farms in Kenya. *J. Anim. Sci. Adv.*, 2014, 4(2): 710-721.
41. Niyireba, T.N., C. Ebong, B. Lukuyu, S. Agili, J. Low, and **C.K. Gachuri**. 2014. Effects of location, genotype and ratooning on chemical composition of sweet potato [*Ipomea batatus L.*] Lam] vines and quality attributes of the roots. *Agricultural Journal* 8:315-321.
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July 2017

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