

CURRICULUM VITAE - PROF. J. M. GATHUMA

NAME: Joseph Mwangi Gathuma

PROFESSION: Veterinarian (Animal Health/Veterinary Public Health Specialist)

CURRENT ADDRESS: Faculty of Veterinary Medicine, University of Nairobi, P. O. Box 29053, Nairobi, Kenya.
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DATE OF BIRTH: 15th September, 1943

PLACE OF BIRTH: Nyeri District, Kenya

NATIONALITY: Kenyan

MARITAL STATUS: Married with 4 children

INSTITUTIONAL AFFILIATION Department of Veterinary Public Health, Pharmacology and Toxicology, Faculty of Veterinary Medicine, University of Nairobi.

SCHOOLS AND COLLEGES ATTENDED

1. Alliance High School, Kikuyu 1961 – 1966
2. University of Nairobi 1967 – 1972
3. University of California (Davis)
(Granted a Rockefeller Foundation Fellowship) 1973 – 1974
4. Veterinary College of Norway 1979
(Granted a NORAD fellowship)

COURSES ATTENDED AND EXAMINATIONS PASSED

1. Cambridge School Certificate (Division 1)
Alliance High School, 1964
2. Cambridge Higher School Certificate (4 principles)
Alliance High School, 1966
3. B. V.Sc. – University of Nairobi, 1971
4. MSc. – University of Nairobi, 1974
5. Graduate Courses (Ph.D. coursework) – University of California, Davis,
1973 – 1974 (under Rockefeller Foundation Sponsorship)
6. Ph.D. – University of Nairobi 1978.

Short courses

1. Attended a 3- months informal course in microbiology and immunology at the Department of Microbiology and Immunology in the Veterinary College of Norway, (under NORAD sponsorship) 21st May – 20th August, 1979.
2. Attended a course on economics of Animal Health and Disease Control at the International Livestock Centre for Africa (ILCA), Addis Ababa, Ethiopia, July – August, 1985.

Awards received

Prof. Gathuma has received the following awards:

- Rockefeller Foundation Fellowship for study at the University of California, Davis (Ph. D. Coursework). (1973-74);
- NORAD Fellowship for research at the Veterinary College of Norway (1979);
- Distinguished service award by the University of Nairobi, in recognition of outstanding contribution towards the University mission (2001).
- Distinguished service award by the Department of Public Health, Pharmacology and Toxicology, Faculty of Veterinary Medicine, University of Nairobi,
- Nominated for the 2012 World Organization for Animal Health (OIE) Veterinarian of the Year Award (2012).

PRESENT POSITION

Professor of Veterinary Public Health

PREVIOUS EMPLOYMENT

1. Veterinary Research Officer, Department of Veterinary Services, Ministry of Agriculture, Kenya, April – October 1971.

2. Assistant Lecturer, Faculty of Veterinary Medicine, University of Nairobi, October 1971 – August 1974.
3. Lecturer Faculty of Veterinary Medicine, university of Nairobi, August 1974 – February 1979.
4. Senior lecturer in Veterinary Public Health (from February, 1979) and Chairman, Department of Public Health, Pharmacology and Toxicology, University of Nairobi (from June, 1978).
5. Associate Professor of Veterinary Public Health, University of Nairobi (June, 1985 to 9th March, 1989) and Chairman of Department.

TEACHING EXPERIENCE

UNDERGRADUATE

Teaching of Veterinary Public Health to 3rd, 4th and 5th year students since October, 1971 to-date.

TEACHING AND SUPERVISION OF POSTGRADUATE STUDENTS

Teaching Masters (Master of Veterinary Public Health ({MVPH}) and Master of Veterinary Epidemiology and Economics {MVEE}) students and supervising their research.

I have successfully supervised 33 M.Sc. and 22 Ph.D. students. Currently Supervising 4 M.Sc. and 3 Ph.D. students (see list of students supervised below).

List of Postgraduate Students Supervised or Being Supervised

The following is a list of postgraduate students for whom I have served as a supervisor for the degrees indicated against their names:-

COMPLETED

1. Dr. J.A. Magero (M.Sc.). An assessment of the economic and financial sustainability of the proposed slaughterhouse in Turkana District, Kenya. (2012).
2. Dr. P.M. Ithondeka (Ph. D.). Global sanitary measures and their effect on Kenyan livestock and livestock products export industry. (2011).
3. Dr. G. Matete (Ph. D.). An assessment of the opportunities and constraints to enhanced animal identification, traceability and quality verification in beef marketing chain in Kenya. (2010).
4. Dr. K.A. Kiprono [M.Sc.]. Sero-prevalence and risk factors of tick-borne diseases with emphasis on East Coast fever in pastoral districts of northern Rift Valley Province, Kenya (2010).

5. Dr. E.K. Kiema [M.Sc.]. An estimation of the prevalence of hydatidosis in sheep and goats and determination of its risk factors in northern Turkana, Kenya (2010).
6. Dr. G.N. Njogu (M.Sc.). An assessment of the role of different cadres of private animal health providers in animal health service delivery in Kiambu District, Kenya (2010).
7. Dr. W.K. Maritim(M.Sc.). A survey of Contagious Bovine Pleuropneumonia in the northwestern part of Turkana District, Kenya (2010).
8. Dr. M.W. Maichomo (Ph.D.). The productivity of Orma/Maasai Zebu cross breed cattle under trypanomosis challenge in a pastoral management system (2008).
9. Dr. M.M. Yusuf (M.Sc.). An assessment of the impact of quarantine restrictions on livestock markets, with special reference to Foot and Mouth Disease (FMD) in Garissa District, Kenya.[2008].
10. Dr. B. Bett [Ph.D.]. Evaluating the impact of a tsetse-repellent technology on the incidence of trypanomosis in cattle managed under pastoral production systems in Kajiado and Narok districts, Kenya. [2008].
11. Dr. S. K. Karimi (Ph.D). Factors influencing morbidity, mortality and productivity of calves among Maasai pastoralists of Kajiado District, Kenya. [2007].
12. Dr. J. C. Njanja (Ph.D). Major factors associated with high morbidity, mortality and poor performance of camel calves, kids and lambs in the Rendille and Samburu pastoral herds in Marsabit District, Kenya. [2007].
13. Dr. P. Munyua (M.Sc.). Toxicological assessment of a tsetse repellent developed for smallholder indigenous communities of sub-Saharan Africa, on the health of exposed animals. [2006].
14. Dr. M.M. Yusuf (M.Sc.). An assessment of the impact of quarantine restrictions on livestock markets with special reference to Foot and Mouth disease in Garissa District, Kenya (2005).
15. Dr. R.L. Arasio (M.Sc.). Participatory study of Livestock Marketing Strategy in Loima Division, Turkana District, Kenya.(2004).
16. Dr. D.T. Kaitho (M.Sc.). Community Participatory Epidemiology and Modelling of Contagious Bovine Pleuropneumonia in Turkana District, Kenya (2003).
17. Dr. M.E. Eregae(M.Sc.). Participatory Market Research in Business Planning for Private Pastoral Veterinary Practice in Turkana District, Kenya (2003).
18. Dr. T. Gitau (Ph.D) An integrated assessment of Agroecosystem Health in Smallholder dairy farming in Kiambu District, Kenya (2003)..

19. Dr. E. N. Njoroge (PhD) Evaluation of ultrasonographic Diagnosis, Treatment methods and Epidemiology of cystic echinococcosis in sheep and goats (2001).
20. Nyabenyi Tito Tipo (MSc) An experimental establishment of infection of rates *Haemonchus contortus* in two breeds of sheep in Kenya (2000).
21. Kirembe Gerald (MSc). Economics of peri-urban zero grazing in Uganda. The case of Mpigi District (1999)
22. Dr. G. W. J. Njoroge (MSc) Studies on the preventive and curative ethnoveterinary remedies applied by the Rendille/Arial and Gabra ethnic groups of Marsabit District, Kenya.
23. Odoi, Agricola (Ms.C.) Production constraints with special reference to the effects of gastrointestinal nematodes on weight gain of small ruminants in smallholders mixed farms in Kiambu District, Kenya (1998).
24. Dr. Njue, S. W. (MSc.) An epidemiological study of ascites in broiler birds in the per-urban of Nairobi (1997).
25. D. P. Sakwa (MSc.) A study of sheep helminthiosis with special emphasis on patterns of infection and the development and survival of *Haemonchus contortus* larvae in Muguga, Kenya (1996).
26. Dr. P. M. Gatongi (Ph.D) Significance of hypobiosis in the epidemiology and control of gastrointestinal nematodes of small ruminants in a marginal area of Kenya (1995).
27. Dr. S.J.M. Munyua (Ph.D) Reproductive efficiency in indigenous goats and its socio-economic effects on semi-arid and arid producers with emphasis on postpartum anestrus (1997).
28. Dr. P. M. Kitala (Ph.D) Epidemiology of dog rabies in Machakos District, Kenya.
29. Dr. N. E. Maingi (Ph.D.) Epidemiology and anthelmintic resistance of gastrointestinal nematodes in sheep in Nyandarua District of Kenya (1998).
30. Dr. R. M. Waruiru (Ph.D.) The epidemiology and control of gastrointestinal nematodes of cattle in sheep in Kiambu, Kenya (1998).
31. Dr. T.W. Mwangi (M.Sc.). Prevalence survey of hydatidosis in Dagoretti area, Nairobi, Kenya (1997).
32. Dr. Njue, S. W. (MSc.) An epidemiological study of ascites in broiler birds in the per-urban of Nairobi (1997).

33. D. P. Sakwa (M.Sc.) A study of sheep helminthiosis with special emphasis on patterns of infection and the development and survival of *Haemonclus contortus* larvae in Muguga, Kenya (1996).
34. Dr. C. D. Laker (M.Sc.) The Socio-economics of East Coast fever immunisation in Uganda
35. Dr. C. Ngatia (M.Sc.) An evaluation of the impact of the Pilot Hydatid Control Programme in North-Western Turkana .
36. Dr. C. O. Ogeto (M.Sc.) An epidemiological survey of bovine fascioliasis in selected districts of Kenya (1994).
37. Dr. P. B. Gathura (Ph.D) The epidemiology and immunodiagnosis of hydatid disease in Kenya (1992).
38. Dr. J. N. Waitumbi (Ph.D) Studies on epidemiology and chemotherapy of camel trypanosomiasis in Ngurunit and Olturot areas of Marsabit District, Eastern Kenya (1992).
39. Dr. S. M. Kariuki (M.Sc.) Phenotypic and genotypic identification of tetracycline resistance genes in *Salmonella typhimurium* isolates in man and the bovine.
40. Dr. S. M. Macharia (M.Sc.) A comparative seroepidemiological survey for the prevalence of *Leptospira* antibodies in domestic animals, rodents and man in Kenya.
41. Dr. T. M. Wachira (Ph.D.) Studies in the epidemiology and control of *Echinococcus granulosus* in Kenya (1989)
42. Dr. F. M. Njeruh (Ph.D.) Biochemical characterization of a hydatid cyst antigen and the antigen's role in serological diagnosis of hydatid disease in livestock and man (1988)
43. Dr. A. Phakkey (M.Sc.) *Legionella* and *Legionellosis*: An overview and a preliminary study in Kenya (1987)
44. Dr. E. K. Kange'the (Ph.D.). Species identification of fresh meat, heat-treated meat and internal organs using antisera to thermostable antigens (1987).
45. Dr. B. D. Akanmori (M.Sc.) Enterotoxin *E. Coli*: animal reservoirs as potential sources of human diarrhea disease (1986).
46. Dr. P. K. Turkson (M.Sc.) *Campylobacter* and *Yersinia*: animals as potential sources of human infection (1985).
47. Dr. M. M. Kagiko (Ph.D.) Immunodiagnosis of hydatid disease in livestock (1986)

48. Dr. E. I. P. Kamanga-Sollo (Ph.D.) Immunodiagnosis of bovine cysticercosis using selected antigens (1986).
49. Dr. P. Maina Gatongi (M.Sc.) An epidemiological study of gastrointestinal nematodes in cattle with special reference to weather factors in Tetu Division of Nyeri District, Kenya, (1984)
50. Mrs. J.A. Onyango-abuje (Ph.D.) Antigenic components of *Taenia saginata* oncospheres and their use in immuno-diagnosis of bovine cysticercosis (1985)
51. Dr. J. A. Otwel (M.Sc.) A serological survey of the prevalence of antibodies to *Toxoplasma gondii* in animals and man in Kenya (1984)
52. Dr. P. B. Mbutia (M.Sc.) The epidemiology of theileriosis (with emphasis on East Coast Fever) and some aspects of economics of tick control in Narok District, Kenya (1984)
53. Dr. P. B. Gathura (M.Sc.) Immunodiagnosis of hydatid disease in livestock using an intradermal test and an enzyme immunoassay (1984).
54. Dr. P.M. Gatongi (M.Sc.). An epidemiological study of gastrointestinal nematodes in cattle with particular reference to weather factors in Tetu Division of Nyeri District, Kenya (1984).
55. Dr. D. K. Gasangwa (M.Sc.) The use of selected antigen in enzyme immunoassay for diagnosis of bovine cysticercosis (1983)
56. Dr. M. N. Kyule (M.Sc.) An evaluation of enzyme immunoassay for diagnosis of bovine cysticercosis (1983).
57. Dr. M. Kayihura (M.Sc.) Salmonella reservoirs in animals as sources of human infection (1982).
58. Dr. F.M. Njeruh (M.Sc.) Preparation of a hydatid cyst antigen and its use in the serodiagnosis of hydatid disease in livestock (1982).
59. Dr. E.I.P. Kamanga-Sollo (M.Sc.) Partial characterization of antigens of *C. bovis* (1981).
60. Dr. U.H.F Ushewokunze-Obatolu (M.Sc.) Residues in cattle milk and rat organs following dermal application of quintiofos Bacdip (1981).

IN PROGRESS

61. Dr. T.N. Manga (M.Sc.). A study on the association between pastoral migration patterns and transboundary livestock disease outbreaks in north western Turkana, Kenya, using participatory epidemiology and Geographical Information Systems [GIS].
62. Dr. Z. Mwaura (M.Sc.). The impact of quarantines on livestock marketing , with special reference to Foot and Mouth Disease (FMD) in Marsabit District, Kenya.
63. Dr. Nthanga (M.Sc.). Studies on the epidemiology and economics of CBPP control in Kajiado District, Kenya.
64. Dr. T. Mukholi (M.Sc.). An assessment of the economics of ECF control in Narok District, Kenya.
65. Dr. F.D. Wesonga [Ph.D.]. Epidemiology and economics of Heartwater [Cowdriosis] in a small-scale ruminant production system in Machakos District, Kenya.
66. Dr. Massimo Castiello (Ph.D.). An investigation of constraints and opportunities in setting up hygiene standards in Somalia`s meat export industry.
67. Dr. Wamalwa Kinyanjui (Ph.D.). Evaluating the Effectiveness, Efficiency and Impact of Training Programs and the Supporting Marketing Infrastructure Development on the Meat Sector in Somaliland.

I have examined many M.Sc.. and Ph.D theses and have sat on many boards of examiners for M.Sc. and Ph.D candidates.

EXTERNAL EXAMINER

Have served as external examiner in:

1. Ahmadu Bello University, Nigeria in Veterinary Public Health and Preventive Medicine – 1981 – 1983.
2. Makerere University, Uganda – Veterinary Public Health and Preventive Medicine – 1982 – 1986; 1993

3. University of Dar-es-Salaam and Sokoine University of Agriculture, Tanzania – Veterinary Public Health, Epidemiology and Veterinary Jurisprudence – 1983 – 1990.
4. University of Zambia – Veterinary Epidemiology and Economics – 1990.

CURRICULUM DEVELOPMENT

Played the lead role in development of curricula for Master of Veterinary Public Health (MVPH) and M.Sc. in Veterinary Epidemiology and Economics (MVEE) in the Department of Public Health, Pharmacology and Toxicology, Faculty of Veterinary Medicine, University of Nairobi.

RESEARCH EXPERIENCE AND INTERESTS

- A. Epidemiology of Zoonoses in Kenya.
- B. Epidemiology and Economics of Livestock Diseases.
- C. Milk hygiene
- D. Wildlife diseases/problems.
- E. .Delivery of Animal Health Services.
- F. Natural Resources Management.

ADMINISTRATIVE EXPERIENCE

Chairman of Department from June 1978 to July 1992.

Dean, Faculty of Veterinary Medicine from April, 1992 – October, 1997.

Member of several Faculty and College committees.

Have acted as Principal, College of Agriculture and Veterinary Sciences, on several occasions.

PUBLIC SERVICE/CONSULTANCIES

Prof. Gathuma has held numerous appointments as researcher and consultant in many private, public, regional and international organizations. He has gained extensive experience in animal health and related issues under pastoral systems especially in Kenya, South Sudan and Somalia.

Prof. Gathuma has served as a consultant for the following organizations: FAO, UNDP, UNEP, World Bank, EC, Land `O` Lakes/USAID, USAID/Technoserve, Pathfinder/USAID, SNV Netherlands Development Organization, GOK,

SIDA, GOK/World Bank, GEF/UNEP/AGREF, NORAD, KARI/ODA, KARI/DFID, MIAC/USAID, ILRI, ICIPE, AGREF/Bayer E.A, Hoechst E.A Ltd., Terra Nuova/AMREF, Kenya National Academy of Sciences, Catholic Diocese of Torit, South Sudan.

PUBLICATIONS

BOOKS

1. **Gathuma, J.M.** and Makau, B.F. Comparative Analysis of Veterinary Drugs Delivery Mechanisms in the Arid Lands of Kenya. Publishers: The House of Hedges, Nairobi, Kenya. ISBN: 9966-9666-2-5. Year 2005. 113pp.

Copy Right : Arid Lands Resource Management Project (2005).

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2. Mbogo, S.G., **Gathuma, J.M.** and Makau, B.F. Livestock Marketing and Support to the Establishment of Disease Free Zones/Disease Free Export Zones in Kenya. Publishers: The House of Hedges, Nairobi, Kenya. ISBN: 9966-9666-3-3.

Copy Right: Arid Lands Resource Management Project (2005)

3. Nyariki, D.M., Makau, B.F., Ekaya, W.N. and **Gathuma, J.M.** Guidelines for Emergency Livestock Off-take Handbook. Publishers: The House of Hedges, Nairobi, Kenya. ISBN: 9966-9666-5-x. Year 2005.

Copy Right: Arid Lands Resource Management Project (2005).

4. **Gathuma, J. M.**, Kagiko, M. M., Mpoke, L., Njoro, J. and Wanyama, J. (Eds.) Community-based Animal Health Care in East Africa: Experiences and Case Studies with particular Reference to Kenya. Publishers: Intermediate Technology Development

Group East Africa. Nairobi, ISBN 9966-931-04-X. Year 2000.

THESIS:

1. Gathuma, J. M. The role played by wild carnivores in the epidemiology of bovine cysticercosis in Kenya. M.Sc. thesis, University of Nairobi, 1973.
2. Gathuma, J. M. Immunodiagnosis and seroepidemiology of *Cysticercus bovis* infection in Kenya. Ph.D. thesis, University of Nairobi, 1977.

PUBLICATIONS IN REFERRED

1. Castiello, M., Wamalwa, K., Njue, S., **Gathuma, J.M.**, Ombui, J.N. and Ogara, W. (2013). Opportunities and challenges of setting up an articulate HACCP system in export slaughterhouses in countries emerging from conflict: An appraisal of North-western Somalia. Food and Nutrition Sciences 4(2), 126-130.
2. Mbogoh, S.G. and **Gathuma, J.M.** (2012). Methodological issues and applications in economic evaluation of alternative livestock diseases control

- strategies: The case of the CBPP quarantine line in North-Eastern Kenya. *Journal of Agricultural Science and Technology A* 2 (5), 640-659.
3. Wamalwa, K., Castiello, M., Munyua, S.M.J., Abdullahi, R.G., **Gathuma, J.M.**, Ombui, J.N. and Mogoia, E.M. (2012). Commercialization of meat trade: the potential role of private sector and capacity building in quality assurance in meat export trade from regions of Somalia: *IRJM* 13(3),86-93; <http://www.internationaljournals.org/IRJM>
 4. Karimi, S.K., McDermott, J.J., Gitau, G.K., McDermott, B., **Gathuma, J.M.** and Kinuthia, R.N. (2012). Genetic, environmental and other factors affecting average daily weight gain of calves in the southern rangelands of Kenya. *Kenya J. Sci. Tech. Inn.* 3, 9-15.
 5. Kiprono, K.A., **Gathuma, J.M.**, Kitala, P.M. and Kiara, H.K. (2011a). Prevalence of tick-borne infections in extensive cattle management system in West Pokot District, Kenya. *Bulletin of Animal Health and Production in Africa*, 59(1), 2011.
 6. Kiprono, K.A., **Gathuma, J.M.**, Kitala, P.M. and Kiara, H.K. (2011b). Pastoralists' perception of East Coast fever on cattle production under extensive management in North Rift Valley, Kenya. *Livestock Research for Rural Development*, 23(6), 2011.
 7. Wamalwa, K., Castiello, M., Ombui, J.N. and **Gathuma, J.M.** (2011). Capacity building: benchmark for production of meat with low levels of bacterial contamination in local slaughterhouses in Somaliland. *Tropical Animal Health and Production*, 2011, 41. www.unboundmedicine.com/Tropical animal health and production.
 8. F.D. Wesonga, P.M. Kitala, **J.M. Gathuma**, M.J. Njenga, P.N. Ngumi (2010). An assessment of tick-borne diseases constraints to livestock production in a smallholder livestock production system in Machakos District, Kenya. *Livestock Research for Rural Development*, **22(6)**: 1 -15.
 9. Matete, G.O., **Gathuma, J.M.**, Muchemi, G., Ogara, W. Maritim, W. and Moenga, B. (2010a). Institutional and organisational requirements for implementing the Livestock Identification and Traceability System in Kenya. *Livestock Research for Development. Volume 22, Article No. 182.* <http://www.Irrd.org/Irrd22/10/mate22182.htm>

10. Matete, G.O., Maingi, N., Muchemi, G., Ogara, W. and **Gathuma, J.M.** (2010b). Design and development of an electronic identification and traceability system for cattle under pastoral production systems: A case for Kenya. *Livestock Research for Rural Development*. Volume 22, Article No. 139. <http://www.Irrd.org/Irrd22/8/mate22/8/mate22139.htm>
11. Matete, G.O., Maritim, W., Muchemi, G., Maingi, N., **Gathuma, J.M.** and Ogara, W. (2010c). Long-term performance of electronic devices and model traceability system for cattle under pastoral production systems in Kenya. *Livestock Research for Rural Development*. Volume 22, Article No. 181. <http://www.Irrd.org/Irrd/22/10/mate22181.htm>
12. Bett, T.F., Randolph, P., Irungu, S.O., Nyamwaro, P., Kitale, J., **Gathuma, D.** Grace, G., Vale, J., Hargrove, J., McDermott (2010). Field trial of a synthetic tsetse-repellent technology developed for the control of bovine trypanosomosis in Kenya. *Preventive Veterinary Medicine*, **97**: 220 – 227.
12. Maichomo, M. W., Gitau, G. K., **Gathuma, J. M.**, Ndung'u, J. M., Kosura, W. O. (2009a). Factors associated with adaptation and performance of trypanotolerant orma boran bulls in Kajiado district, Kenya. *Bulletin of Animal Health and Production in Africa*.
13. Maichomo M W, Kosura, W.O., **Gathuma J. M.**, Gitau G K, Ndung'u J. M., and Nyamwaro, S. O. (2009b). Economic assessment of the performance of trypanotolerant orma/zebu cross cattle in a pastoral production system in Kenya. *Journal of South African Veterinary Association* (2009) 80(3): 157-162.
14. Bett, B., Irungu, P., Nyamwaro, S.O., Murilla, G., Kitale, P., **Gathuma, J. M.**, Randolph, T.F. and McDermott, J. (2008). Estimation of tsetse challenge and its relationship with trypanosomosis incidence in cattle kept under pastoral production systems in Kenya. *Veterinary Parasitology* 155(3-4):287-298.
15. Njanja J C, **Gathuma J. M.**, Gitau G K, Njeruh F M, Ngugi R. K. (2008). Measures of Health and Production in Preweaned Kids in Pastoral Herds in Northern Kenya. *Bulletin of Animal Health and Production in Africa* (2008) 56: 78-89.
16. Odoi, A., **Gathuma, J.M.**, Gachuri, C.K. and Omere, A. (2008). Feeding practices and effects of gastrointestinal parasite infections on live weight gain of small ruminants in smallholder mixed farms in Kenya. *Research in Veterinary Medicine*, 84 (2), 185-193. DOI 10.1016/j.rvsc.2007.04.013.
17. Odoi, A., **Gathuma, J.M.**, Gachuri, C.K. and Omere, A. (2007). Risk factors of gastrointestinal nematodosis in small ruminants kept in smallholder mixed farms in Kenya. *BMC Veterinary Research*, 3:6.
18. Karimi, S.K., McDermott, J.J., Kinuthia, R.N. and Gathuma, J.M. (2005). Estimation of body weight of Maasai Zebu calves and their crosses with Sahiwal and Boran in Kajiado District, Kenya. *Bull. Anim. Hlth. Prod. Afr.* 53: 35-41.
18. Chema, S. and, **Gathuma, J.M.** (2004). Kenya: the development of private services and the role of the Kenya Veterinary Association. In: *Veterinary institutions in the*

developing world: current status and future needs.OIE Technical and Scientific Review, Vol. 23,331-340. (**Invited contribution**).

19. **Gathuma,J.M.**, Mbaria, J.M., Wanyama, J., Kaburia, H.F.A,Mpoke, L. and Mwangi, J.N.(2004).Efficacy of *Myrsine africana*, *Albezia anthelmintica* and *Hilderbrantia seplosa* herbal remedies against mixed natural sheep helminthoses in Samburu District, Kenya.Journal of Ethnopharmacology, 91, 7-12.
20. Njanja, J.C., **Gathuma,J.M.**, Gitau, G.K. Njeruh, F.M. and Kinuthia, R.N. (2003). Pastrolists' perception of livestock production systems and opportunities for improvement in Southwestern Marsabit, Kenya. Livestock Research for Rural Development, 15: (7), 1-16.
21. Njoroge,E.M., Mbithi, P.M.F., **Gathuma, J.M.**, Wachira, T.M.,Gathura,P.B., Magambo, J.K.and Zeyhle, E.(2002).A study of cystic echinococcosis in slaughter animals in three selected areas of northern Turkana. Vet.Parasit.104, 85-91.
22. Kitala, P.M., McDermott, J.J., Kyule, M.N., **Gathuma, J.M.**, Perry, B.D. and Wandeler, A. (2001). Dog ecology and demography information to support the planning of rabies control in Machakos District, Kenya. Acta. Tropica, 78: 217-230.
23. Kitala, P.M., McDermott, J.J., Kyule, M.N., and **Gathuma J.M.** (2000). Community-based active surveillance for rabies in Machakos District, Kenya. *Prev. Vet. Med.*, **44**: 73-85.
24. Munyua, S.J.M., Karioki, D.I., Chibeu, D.M., Wabacha, J.K., Thaiya, A.G., **Gathuma, J.M.** and Mitaru, B.M. (2000). Prognostic indicator of postpartum viability of kids born of Eschericia coli vaccinated or unvaccinated does. J.S. Afr. Vet. Ass. 71(1) 47-52.
25. Njoroge, E.M., Mbithi,P.M.F. **Gathuma, J.M.** Wachira, T.M., Magambo,J.K. and Zeyhle, E. (2000). Application of ultrasonography in prevalence studies of hydatid cysts in goats in north-western Turkana, Kenya and Toposaland, southern Sudan. Onderstepoort Journal of Veterinary Research, 67: 251-255.
26. Waruiru, R.M., Thamsborg, S.M., Nansen, P., Bogh, H.O., Munyua, W.K., **Gathuma, J.M.** and Kyvsgaard, N. (2001). The epidemiology of gastrointestinal nematodes of dairy cattle in central Kenya. Trop. Anim. Hlth. Prod., **33**, 173 – 187.
27. Njoroge, E.M., Mbithi,P.M.F. **Gathuma, J.M.** Wachira, T.M., Magambo,J.K. and Zeyhle, E. (2000). Application of ultrasonography in prevalence studies of hydatid cysts in goats in north-western Turkana, Kenya and Toposaland, southern Sudan. Onderstepoort Journal of Veterinary Research, 67: 251-255.

28. Waruiru, R.M., Kyvsgaard, N., Thamsborg, S.M., Munyua, W.K., **Gathuma, J.M.**, Bogh, H.O. and Nansen, P. (2000). Prevalence and intensity of helminth and coccidia infections in dairy cattle in central Kenya. *Vet. Res. Commun.*, **34**, 39 – 53.
29. Njoroge, E.M., Mbithi, P.M.F., **Gathuma, J.M.**, Wachira, T.M., Magambo, J.K. and Zeyhle, E. (2000).. Application of ultrasonography in prevalence studies of hydatid cysts in goats in north-western Turkana, Kenya and Toposaland, southern Sudan. *Onerstepoort Journal of Veterinary Research*, **67**, 251 – 255.
30. Njenga, M.J., Munyua, S.J.M., Mutiga, E.R., **Gathuma, J.M.**, Kangethe, E.K., Mugeru, G.M., Bwangamoi, O. and Mitaru, B.N. (1999). Semen characteristics of goats with subacute, acute and chronic besnetiosis. *Jl. S.Afr. Vet.Ass.*, 70: 18-20.
31. Odoi, A., Gathuma, J.M., Gachui, C.K., Omoro, A., Gitau, T., Wanyangu, S.W. and Murage, E. (1998). Constraints to small ruminant production in smallholder mixed farms in Kiambu District, Kenya. *The Kenya Veterinarian* 23 (Special Issue), 145-147.
32. Mwangi, J.M., Otieno, G.O., Suda, C., Gitau, T., McDermott, J.J., Waltner-Toews, D., **Gathuma, J.M.**, Kangethe, E.K., Kimani, V.W., Kilungo, J.K., Muni, R.K. and Khasiani, S.A. (1998). Social economic constraints to agricultural productivity in Kiambu District. *Kenya Veterinarian*, 23: 63-65.
33. Oteno, G.O., Suda, C., Gitau, T., Mwangi, J.M., McDermott, J.J., Waltner-Toews, D., **Gathuma, J.M.**, Kangethe, E.K., Kimani, V.W., Kilungo, J.K. and Muni, R.K. (1998). Participatory action research : the missing link to sustainable and effective intervention in agricultural communities in an agroecosystem health framework. *Kenya Veterinarian*, 23: 66-69.
34. Gitau, T., McDermott, J.J., Waltner-Toews, D., **Gathuma, J.M.**, Kangethe, E.K., Kimani, V.W., Kilungo, J.K., Muni, R.K., Mwangi, J.M. and Otieno, G.O. (1998). The agrosystem health approach: an integrated assessment of smallholder dairy farms in Kiambu District, Kenya. *Kenya Veterinarian*, 23: 37-40.
35. Maingi, N., Bjorn, H., Munyua, W.K. and **Gathuma, J.M.** (1998). Resistance to benzimidazoles and levamisole in nematode parasites of sheep in Nyandarua District of Kenya. *Acta Tropica*, 69, 31-40.
36. Munyua, S.J.M., **Gathuma, J.M.**, Mitaru, B., Kariuki, D.I. Some postpartum blood profiles and some prognostic indicators of viability of goat kids. *Journal of South Africa Veterinary Association*.
37. Munyua, S.J.M., **Gathuma, J.M.**, Mitaru, B.N., Mugivane, F., Wabacha, J.K. and Thaiya, A.G. A case of the economics of application of veterinary intervention packages in goat-production systems in Kenya. *Journal of Preventive Veterinary Medicine*.

38. Njenga, M.J., Munyua, S.J.M., Mutiga, E.R., **Gathuma, J.M.**, Kang'ethe, E.K., Bwangamoi, O., Mugeru, G.M. and Mitaru, B.N. Semen characteristics from bucks with sub-acute and chronic besnoitiosis. *Journal of South Africa Veterinary Association*.
39. Gatongi, P.M., Richard, R.K., Ranjan, S., **Gathuma, J.M.**, Munyua, W.K., Cheruiyot, H. and Scoot, M.E. (1998). Hypobiosis of *Haemonclus contortus* in natural infections of sheep and goats in a semi-arid area of Kenya. *Vet. Parasit.* **77**, 49 – 61.
40. Waruiru, R.M., Nansen, P.O., Kyvsgaard, N., Thamsborg, S.M., **Gathuma, J.M.** and Bogh, H.O (1998). An abattoir survey of gastrointestinal nematode infections in cattle in the central highlands of Kenya. *Vet. Res. Commun.*, **22**, 325 – 334.
41. Waruiru, R.M., Munyua, W.K., Thamsborg, S.M., Nansen, P., Borgh, H.O. and **Gathuma, J.M.** (1998). Development and survival of infective larvae of gastrointestinal nematodes of cattle on pasture in central Kenya. *Vet. Res. Commun.*, **22**: 315-323.
42. Waruiru, R.M., Munyua, W.K., Thamsborg, S.M., Nansen, P., Bogh, H.O. and **Gathuma, J. M.** (1998). Development and survival of infective larvae of gastrointestinal nematodes of cattle on pasture in central Kenya. *Vet. Res. Commun.*, **22**, 315 – 323.
43. Gatongi, P.M., Prichard, R.K., Ranjan, S., **Gathuma, J.M.** Munyua, W.K., Cheruiyot, H., and Scott, M.E. (1998). Hypobiosis of *Haemonchus contortus* in natural infections of sheep and goats in a semi-arid area of Kenya. *Vet. Parasitol.* **77**, 49 – 61.
44. Njeruh, F.M., **Gathuma, J.M.**, Gathura, P.B. Kyule, M.N. and Hammergerg, B. (1998). The application of monoclonal antibodies in identification of a hydatid cyst antigen found in boiled sera from individuals with hydatid disease and its significance in diagnosis of hydatid disease caused by *E. granulosus* in man. *The Kenya Veterinary Journal* **23**: 200-204.
45. Gatongi, P.M., Scott, M.E., Ranjan, S., **Gathuma, J.M.**, Munyua, W.K., Cheruiyot, H. and Prichard R.K. (1997). Effects of three nematode anthelmintic treatment regimes on flock performance of sheep and goats under extensive management in semi-arid Kenya. *Vet. Parasitol.* **68**, 323 – 336.
46. Maingi, N., Thamsborg, S.M., Munyua, W.K. and **Gathuma, J.M.** (1997). The strategic use of closantel and albendazole in controlling naturally acquired gastrointestinal nematodes of sheep in the Kenya Highlands. *Veterinary Research Communications*, **21**: 547-557.

47. Maingi, N., Gichohi, V.M., Munyua, W.K., **Gathuma, J.M.** and Thamsborg, S.M. (1997). The epidemiology of nematode and liverfluke infections in sheep in Nyandarua District of Kenya. *Bull. Anim. Hlth. Prod. Afri.* **45**, 27-34.
48. Maingi, N., Bjorn, H., Thamsborg, S.M., Munyua, W.K., **Gathuma, J.M.** and Dangolla, A. (1997). Worm control practices on sheep farms in Nyandarua District of Kenya. *Acta Tropica*, **68**:1-9.
49. Waruiru, R.M., Weda, E.H., Bogh, H.O., Munyua, W.K., **Gathuma, J.M.**, Thamsborg, S.M. and Nansen, P. (1997). The efficacy of morantel sustained release trilaminar bolus against gastrointestinal nematodes in grazing dairy calves in Kenya. *Trop. Anim. Hlth. Prod.*, **29**, 129 – 140.
50. Waruiru, R.M., Weda, E.H., Otieno, R.O., Ngotho, J.W., Munyua, W.K., **Gathuma, J.M.** (1997). The prevalence and intensity of infection with *Fasciola gigantica* in cattle in Kiambu District, Kenya. *Bull. Anim. Prod. Afr.*, **45**, 147 – 153.
51. Waruiru, R.M., Weda, E.H., Thamsborg, S.M., Munyua, W.K., **Gathuma, J.M.**, Bogh, H.O. and Nansen, P. (1996). The effects of anthelmintic treatment on nematode parasitism and liveweight gains of dairy calves under field conditions in Kenya. *Bull. Anim. Prod. Afr.* **44**, 125 – 133.
52. Kitale, P.M., McDermott, J.J., Kyule, M.N. and **Gathuma, J.M.** (1993). Features of dog ecology relevant to rabies spread in Machakos District, Kenya. *Onderstepoort Journal of Veterinary Research*, **60**, 445 – 449.
53. Kariuki, S., Mirza, N. B., Wastenson, y., Senerwa, D., **Gathuma, J.M.** and Olsvik, O. (1992). Tetracycline resistance genes in Kenyan hospital isolates of *Salmonella typhimurium*. *Acta. Path. Microbiol. Immunol. Scand.* **100**, 629 – 634.
54. Senerwa, D. Mutanda, L.N., **Gathuma, J.M.** and Olsvik, O (1991). Antimicrobial resistance enteropathogenic *Escherichia coli* strains from a nosocomial outbreak in Kenya. *Acta. Path. Microbiol. Immunol. Scand.* **99**, 728 – 734.
55. Gathura, P.B. and **Gathuma, J.M.** (1991). An evaluation of economic losses resulting from condemnation of cattle and small stock livers due to the presence of hydatid cysts in Kenya. *Bull. Anim. Hlth. Prod. Afr.* **39**, 225 – 229.
56. Kagiko, M.M., Lindqvist, K. and **Gathuma, J.M.** (1990). Comparison between cattle, sheep and goat liver and lung hydatid cyst fluid for the presence of two hydatid antigens. *Bull. Soc. Fran. Parasitols.* **8**, 964.
57. Gathura, P.B., **Gathuma, J.M.** Okelo, G.B.A. and Njeruh, F.M. (1990). A ten-year review of human hydatid cases seen at the Kenyatta National Hospital (Kenya). *Discovery and Innovation* **2**, (2) 41 – 44.

58. Wachira, T. M., McPherson, C.N.L. and **Gathuma, J.M.** (1990). Hydatid disease in the Turkana District of Kenya, VII: analysis of the infection pressure between definitive and intermediate hosts of *Echinococcus granulosus*, 1979 – 1988. *Ann. Trop. Med. Parasitol.* 84 (4), 361 – 368.
59. Njeruh, F.M., **Gathuma, J.M.** and Tumboh-Oeri, A.G.(1990). An enzyme-linked immunosorbent assay (ELISA) for livestock hydatidosis based on a partially purified thermostable antigen. (*Bull. Anim. Hlth. Afr.*,38, 7-10.).
60. Gathura, P.B. and **Gathuma, J.M.** The distribution of Arc-5 antigen in human hydatid tissue and other parasites and evaluation of the double diffusion test (DD) for the detection of antibodies to the Arc-5 in human sera. *E. Afr. M. J.* (in press).
61. Gathura, P.B. and **Gathuma, J.M.** The prevalence of hydatid disease in pigs in Kenya. *E. Afr. Agric. Forest J.* (in press).
62. Njeruh, F.M., Kagiko, M.M. and **Gathuma, J.M.** (1989). Diagnosis of hydatid disease in livestock by use of indirect haemagglutination (IHA) test and its possible application in the control of hydatid disease in Kenya. *Bull. Anim. Hlth. Prod. Afr.* (Special issue), 163 – 165.
63. Gathura, P.B and **Gathuma, J.M.** (1989). Recent trends in the incidence of livestock and human hydatid disease in Kenya. *Bull. Anim. Hlth. Prod. Afr.* (Special issue), 159 – 162.
64. Senerwa, D., Olsvik, O, and **Gathuma, J.M.** (1989). Plasmid mediated antimicrobial resistance in *Klebsiella pneumonia* strains isolated from neonates in a hospital ward. *Bull. Anim. Hlth. Prod. Afr.* (Special issue), 123 – 126.
65. Wachira, T.M., McPherson, C.N.L. and **Gathuma, J.M.** Release and survival of *Echinococcus* eggs in different environments in Turkana and their possible impact on the incidence of hydatidosis in man and livestock (*Ann. Trop. Med. parasitol.* – accepted).
66. Senerwa, D., Olsvik, O., Mutanda, L.N., **Gathuma, J.M.**, Fossum, K. and Wachsmuth, K. (1989). Colonization of neonates in a nursery ward with enteropathogenic *Escherichia coli* and correlation to the clinical histories of the children *J. Chin. Microbiol.*, 27, 2539 – 2543.
67. Senerwa, D., Olsvik, O., Mutanda, L.N., Lindqvist, K.J., **Gathuma, J.M.**, Fossum, K. and Wachsmuth, K. (1989). Enteropathogenic *Escherichia coli* 0111:HNT isolated from pre-term neonates in Nairobi, Kenya. *Journal of Clinical Microbiology* 27, 1307 – 1311.
68. Njeruh,F.M., Gathura, P.B. and **Gathuma,J.M.**(1989). Application of enzyme-linked immunosorbent assay (ELISA) based on two *E. granulosus* antigens in the diagnosis of human hydatidosis. *East Afri. Med. J.* 66: 738-744.

69. Njeruh, F.M., **Gathuma, J.M.**, Tumboh-Oeri, A.G. and Okelo, G.B.A. (1989). Purification and partial characterization of a thermostable lipoprotein (“Antigen 880”) of hydatid cyst fluid (HCF). *E. Afr. M. J.* **66**: 507-515.
70. Njeruh, F.M., **Gathuma, J.M.**, Okelo, G.B.A. and Tumboh-Oeri, A.G. (1989). The amino acid and fatty acid composition of a thermostable lipoprotein (“Antigen 880”) of hydatid cyst fluid (HCF). *E. Afr. M. J.* **66**, 219 – 230.
71. Gathura, P.B. and **Gathuma, J.M.** An enzyme-linked Immunosorbent assay (ELISA) based on the “Arc 5 antigen” for diagnosis of human hydatidosis in Kenya. (*E. Afr. M. J.* submitted).
72. Onyango-Abuje, J.A., Waiyaki, P.G. and **Gathuma, J.M.** (1989). Specific and shared antigen components of *Taenia saginata* oncospheres. *Research in Veterinary Science* **47**, 236 – 240.
73. Njeruh, F.M., **Gathuma, J.M.**, Okelo, G.B.A. and Tumboh-Oeri, A.G. (1989). Diagnosis of human hydatid disease in surgically confirmed cases by use of indirect haemagglutination (IHA) test based on a thermo-stable lipoprotein (“Antigen 880”) and unfractionated hydatid cyst fluid (HCF). *Ann. Trop. Med. parasitol*, **83**, 299 – 303.
74. Njeruh, F.M., Okelo, G.B.A. and **Gathuma, J.M.** (1989). Usefulness of the indirect haemagglutination test (IHA) and the enzyme-linked immunosorbent assay (ELISA) in the diagnosis of human hydatidosis *E. Afr. Med. J.* **66**, 310 – 315.
75. Njeruh, F.M., Gathura, P.B., **Gathuma, J.M.** Okelo, G.B.A. and Tumboh-Oeri, A.G. Diagnosis of human hydatid disease using enzyme-linked immunosorbent assay (ELISA) based on “Antigen 880” and “Arc 5”. *E. Afr. Med. J.* (submitted).
76. Njeruh, F.M., **Gathuma, J.M.**, Okelo, G.B.A. and Tumbo-Oeri, A.G. Evaluation of the usefulness of the enzyme-linked immunosorbent assay (ELISA) in diagnosis of human hydatid disease. (*Trans. Roy. Soc. Trop. Med. Hyg.*, accepted).
77. **Gathuma, J.M.**, Chema, S. and Mungai, J.N. An epidemiological study of fascioliasis in Kenya. (*Bull. Anim. Hlth. Prod. Afr.* – accepted).
77. Mbuthia, P.G., **Gathuma, J.M.** Nyaga, P.N. and Kamundia, J. An epidemiological study of theileriosis in Trans Mara Division, Narok District, Kenya. (*Bull. Anim. Hlth. Prod. Afr.*, - accepted).
78. **Gathuma, J.M.**, Wale, D.A. and Kaburia, H. F. A. Toxigenicity, plasmid profiles and antimicrobial susceptibilities of *Aeromonas hydrophila* isolates from Lake Victoria fish. (*E. Afr. M. J.* – accepted).

- 79. Gathuma, J.M.,** Kaburia, H.F.A. and Wale, D.A. Isolation and identification of bacterial and parasitic pathogens from fish obtained from Lake Victoria. (Bull. Anim. Hlth. Prod. Afr. Accepted).
- 80. Kagiko, M.M.,** Lindqvist, K.J. and **Gathuma, J.M.** Immunological characterization of the antigens of hydatid cyst fluid by crossed immunoelectrophoresis and double diffusion in gel. Clinical experiment Immunology (submitted).
- 81. Njeruh, F.M.,** Gathuma, J.M., and Tumboh-Oeri, A.G. An enzyme-linked immunosorbent assay (ELISA) for livestock hydatidosis based on a partially purified thermostable antigen. Bull. Anim. Hlth. Prod.
- 82. Njeruh, F.M., Gathuma, J.M.** and Tumboh-Oeri, A.G. Detection of hydatidosis in livestock in Kenya by indirect haemagglutination (IHA) based on a partially purified thermo-stable antigen (Kenya Veterinarian accepted).
- 83. Njeruh, F.M., Gathuma, J.M.** and Tumboh-Oeri, A.G. Application of the Indirect Haemagglutination Test (IHA) based on a thermostable antigen in the diagnosis of hydatid disease in livestock in Kenya. (Kenya Veterinarian, accepted).
- 84. Njeruh, F.M.,** Gathuma, J.M., Okelo, G.B.A. and Tumboh-Oeri, A.G. (1989). Diagnosis of human hydatid disease in surgically confirmed cases by use of indirect haemagglutination (IHA) test based on a thermostable lipoprotein ("Antigen 880") and unfractionated hydatid cyst fluid (HCF). Ann. Trop. Med. Parasit. 83, 299-303.
- 85. Njeruh, F.M.,** Okelo, G.B.A. and Gathuma, J.M. (1989). Usefulness of the indirect haemagglutination test (IHA) and enzyme-linked immunosorbent assay (ELISA) in the diagnosis of human hydatidosis. E. Afr. Med. J. 66, 310-314.
- 86. Gathuma, P.B. and Gathuma, J.M.** (1989). An inhibition enzyme immunoassay for the diagnosis of hydatid disease in cattle based on the Arc-5 antigen. Bull. Anim. Hlth. Prod. Afr. 37, 351 – 355.
- 87. Kagiko, M.M.,** and Gathuma, J.M. (1988). Cross-reactions between antigens of hydatid cyst fluid and other cestodes and their implications in the serological diagnosis of hydatidosis in cattle. Excerpta Medica **810**, 366.
- 88. Gatongi, P.M., Gathuma, J.M.** and Munyua, W.K. (1988). The influence of weather on population dynamics of infective larvae of cattle nematodes. Kenya. Bull, Anim. Hlth. Afr., **36**, 148 – 154.
- 89. Gatongi, P.M., Gathuma, J.M.** and Munyua, W.K. (1988). Influence of weather on population dynamics of infective larvae of cattle nematodes in Nyeri, Kenya. Bull. Anim. Prod. Afr., 36, 148 – 154.

90. Gatongi, P.M. **Gathuma, J.M.** and Munyua, W.K. (1987). The prevalence of gastrointestinal nematodes in cattle in Tetu Division of Nyeri District, Kenya. *Bull. Anim. Hlth. Prod. Afr.* **35**, 294 – 297.
91. Gatongi, P.M., **Gathuma, J.M.** and Munyua, W.K. (1987). The prevalence of gastrointestinal nematodes in cattle in Tetu Division of Nyeri District, Kenya. *Bull. Anim. Hlth, Afr.*, **35**, 294 – 297.
92. Kang'ethe, E.K. and **Gathuma, J.M.** (1987). Identification of autoclaved meat samples using antisera to thermostable muscle antigens in an enzyme immunoassay. *Meat Science* **19**, 265 – 270.
93. Njeruh, F.M., and **Gathuma, J.M.** (1987). Serodiagnosis of hydatidosis in livestock by the indirect haemagglutination test (IHA) and the enzyme-linked immunosorbent assay (ELISA). *Bull. Anim. Hlth. Afr.* **35** 124 – 129.
94. Gathura, P.B., **Gathuma, J.M.** and Lindqvist, K.J. (1987). The use of an intradermal test (Casino) in diagnosis of hydatid disease in livestock. (*Bull. Anim. Hlth. Afr.*, **35**, 304 –306.
95. Chema, S., Chumo, R.S., Dolan, T.T., **Gathuma, J.M.**, James, A.D., Irvin A.D. and Young, A.S. (1987). Clinical trial of Halofuginone lactate for the treatment of East Coast fever in Kenya. *Vet. Rec.*, **120**:575 – 577.
96. Kagiko, M.M., **Gathuma, J.M.** and Lindqvist, K.J. (1986). Serological diagnosis of hydatid disease by enzyme linked immunosorbent assay (ELISA) using partially purified hydatid cyst fluid antigens (*International J. Zoon.* **13** (4) 241 – 245.
97. Kagiko, M.M., Lindqvist, H.J. and **Gathuma, J.M.** (1986). An evaluation of the applicability of crossed immunoelectrophoresis in seroepidemiological studies of hydatid disease in livestock. *International J. Zoon.* **13** (4) 230 – 235.
98. Njeruh, F.M., **Gathuma, J.M.** and Tumboh-Oeri, A.G. (1986). Diagnosis of hydatidosis in Kenya II. An Enzyme-linked immuno-sorbent assay (ELISA) based on a thermostable antigen E. *Afr. Med. J.* **63** (5) 318 – 321.
99. Njeruh, F.M., **Gathuma, J.M.** and Tumboh-Oeri, A.G. (1986). Diagnosis of hydatidosis in Kenya I. The role of indirect haemagglutination test (IHA) based on a thermostable antigen E. *Afr. Med. J.* **63** (5) 311 –317.
100. Kang'ethe, E.K., **Gathuma, J.M.** and Lindqvist, K.J. (1986). Identification of the species of origin of fresh, cooked and canned meat using antisera to thermostable muscle antigens by Ochterlony's double diffusion test. *Journal of Science of Food and Agriculture*, **37** 157 – 164.
101. **Gathuma, J.M.** (1986). Control of Protozoal diseases in Eastern Africa; The case for environmental considerations. *Insect Sci. Appl.* (3) 327 – 336.

102. Kamanga-Sollo, E.I.P., Lindqvist, K.J. and **Gathuma, J.M.** (1985). Bovine serum components in *Cysticercus bovis*. *Bull. Anim. Hlth. Prod. Afr.* Vol. 33 (1) 1 – 3.
103. Kang'ethe, E.K., Lindqvist, K. J. and **Gathuma, J.M.** (1984). Immunological reactions of thermostable muscle antigens and their possible use in speciation of cooked and fresh meat (paper presented at an EEC Symposium on meat species identification held in Brussels on 27th and 28th November, 1984, published in *Biochemical Identification of Meat Species*, Elsevier Applied Science Publishers, R. L. S. Patterson (Ed.).
104. Nyaga, P.N., **Gathuma, J.M.** and Kaminjolo, J.S. (1983). Parasites found on and in five Marabou storks (*Leptoptilos crumeniferus*) in a sub-urban area of Nairobi, Kenya. *Bull. Anim. Hlth. Prod. Afr.* **31** 79 – 82.
105. Nyaga, P. N., **Gathuma, J.M.** and Kaminjolo, J.S. (1983). Experimental Infection in Marabou storks with *Salmonella typhimurium* and fowl pox virus. *The Kenya Veterinarians* 5 (2), 10 –11.
106. Ushewokunze-Obatolu, U.H.F., Froslic, A., **Gathuma, J.M.** and Nafsad, I. (1982). Residues of Quintiofos in cattle milk after dermal application of Bacdip. *Bull. Anim. Hlth. Prod. Afr.* **30** 287 – 289.
107. Nyaga, P.N., Kagiko, M.M. and **Gathuma, J.M.** (1982). Milk hygiene in nomadic herds in Kenya evaluated by bacterial isolation, in vitro bacterial viability trials in traditionally fermented milk and drug sensitivity. *Bull. Anim. Hlth. Prod. Afr.* **30** (1) 19 – 23.
- 108. Gathuma, J.M.**, Nyaga, P.N., Omuse, J.K., Nderu, F. M. K. and Kaminjolo, J.S. (1982). Exposure of calves to taeniid eggs of wild carnivore origin. *Bull. Anim. Hlth. Prod. Afr.* **30** (1), 55 – 60.
109. Nyaga, P. N., Kaminjolo, J. S., **Gathuma, J. M.**, Omuse, J.K., Nderu, F. M. K. and Gicho, J.M. (1981). Prevalence of antibodies to Parainfluenza-3 (P13) virus in various wildlife species and domestic cattle sharing the same habitats in Kenya. *J. Wildlife Dis.* **17** (4), 605 –608.
- 110. Gathuma, J. M.** and Waiyaki, P.G. (1980). Comparative studies of the Indirect Haemagglutination (IHA) and Indirect Fluorescent Antibody (IFA) tests in diagnosis of bovine cysticercosis. *Bull. Anim. Hlth. Prod. Afr.* **29** (1), 11 – 18.
- 111. Gathuma, J.M.** and Kagiko, M.M. (1980). *Veterinary Science and Human Health.* *The Kenya Veterinarian* **4** (1), 1 – 4.
- 112. Gathuma, J.M.** and Fossum, K. (1980). Legionnaires' Disease with special reference to its epidemiology – A review. *Nord. Vet-Med.* **32**, 165 – 172.

- 113. Gathuma, J. M.** and Waiyaki, P. G. (1980). Evaluation of the Indirect Heamagglutination test in diagnosis of *Taenia saginata* cysticercosis (*Cysticercus bovis*) infection in cattle. *Bill. Anim. Prod. Afr.* **28** (3), 173 – 189.
114. Fossum, K. and **Gathuma, J.M.** (1979). *Escherichia coli* and colienteritis: A review. *The Kenya Veterinarian* **3** (2), 42 – 45.
115. Fossum, K. and **Gathuma, J.M.** (1979). “New” and “Old” bacteria in the genus *Campylobacter* and their importance in animal and human disease. *The Kenya Veterinarian* **3** (2), 29 – 52.
- 116. Gathuma, J.M.** (1979). A seroepidemiological study of bovine cysticercosis in Kenya. *The Kenya Veterinarian*, **3** (2), 33 – 35.
117. Nyaga, P.N. and **Gathuma, J.M.** (1979). Some observations on *Taenia saginata* cysticercosis in Kenya slaughter cattle. *Bull. Anim. Hlth. Prod. Afr.* **27** (1), 51 – 59.
- 118. Gathuma, J. M.,** Kagiko, M. M. and Nyaga, P. N. (1979). Bacteriological water quality in Kajiado District, Kenya. *E.J. Med. Res.* Vol. 5 No. 1 (1979).
119. Kamau, J. A., Gacuhi, D. M.; Hansen, G. and **Gathuma J.M.** (1978). A study of the toxicity of *Dichapetalum rulandii* (Ludi). *Indian Vet. J.* 55, 626 – 630.
- 120. Gathuma, J. M.,** Sollod, A. E. and Waiyaki, P. g. (1978). Evaluation of the indirect fluorescent antibody test in the diagnosis of *Cysticercus bovis* infection in cattle. *The Kenya Veterinarian* **2** (1), 7 – 11.
121. Waghela, S., Fazil, M. A., **Gathuma, J. M.** and Kagunya, D. K. (1978). A serological survey of brucellosis in camels in Kenya. *Trop. Anim. Hlth. Prod.* **10**, (1) 28 – 29.
122. Omuse, J. K., **Gathuma, J. M.,** Nyaga, P. N., Kaminjolo, J. S. and Nderu, F. M. K. (1978). Verminous pneumonia in topi (*Damaliscus korrigum*) in Maasai-Mara area of Kenya. *Bull. Anim. Hlth. Prod. Afr.* **26** (2) 156 – 160.
- 123. Gathuma, J.M.,** Waghela, S. and Nderu, F.M.K. (1978). A sero-epidemiologic study of brucellosis in abattoir workers in Kenya. *E. Afr. J. Med. Res.* Vol. 4 No. 4 (June, 1978).
124. Waghela, S. and **Gathuma, J. M.** (1976). A serological survey of the prevalence of brucellosis in pigs in Kenya. *Bull. Anim. Hlth. Prod. Afr.* **24** (3) 251 – 253.
- 125. Gathuma J. M.** and Mango, A. M. (1976). The role played by wild carnivores in the epidemiology of bovine cysticercosis in Kenya. *Bull. Anim. Hlth. Prod. Afr.* **24**, (2) 149 – 155.

126. Wegener, J. and **Gathuma, J. M.** (1975). The role of the marabou stork (*Leptotilos crumeniferus lesson*) in Kenya in the spread of Echinococcosis from the abattoir. Tropenmed. Parasit. 43-47.

CONFERENCE PAPERS

1. Mbogoh, S.G. and **Gathuma, J.M.** (2011). Methodological issues and applications in economic evaluation of alternative livestock diseases control strategies: the case of the CBPP quarantine line in North-Eastern Kenya. Faculty of Agriculture Biennial Conference, 26-28 September, 2011; College of Agriculture and Veterinary Sciences, Kabete, Nairobi, Kenya.
2. Karimi, S.K., McDermott, J.J., Gitau, G.K., McDermott, B., **Gathuma, J.M.** and Kinuthia, R.N. (2003). Risk factors for seroprevalence of tick-borne diseases of calves in Maasai pastoral herds in Kajiado District, Kenya. Proceedings of the 10th International Symposium for Veterinary Epidemiology and Economics. Vina, del Mar, Chile. 17-21 November, 2003.
3. Munyua, S.J.M., **Gathuma, J.M.**, Mitaru, B.N., Kariuki, D.I. Chibeu, D.M. (1996). Economics of veterinary intervention in pastoral and semi-sedentary goat production systems in arid and semi-arid areas in Kenya. Kenya Veterinary Association Annual Scientific Conference, held at Whitesands Hotel, Mombasa, 24 – 25 April 1996.
4. Munyua, S.J.M., Mbai, K., Kariuki, D.I., Chibeu, D.M., **Gathuma, J.M.**, Mitaru, B.N. and Nduhiu, J. (1996). Reproductive efficiency of indigenous goats in Kenya I: Slaughterhouse and field surveys. All Africa Conference on Animal Agriculture, Pretoria, South Africa 1996.
5. Waruiru, R.M., Munyua, W.K., **Gathuma, J.M.** and Weda, E.H. (1999). The epidemiology of gastrointestinal nematodes of dairy cattle in Kenya. In: Proceedings of the 17th International Conference on the WAAVP, Copenhagen, Denmark. August 15-19, 1999.
6. Waruiru, R.M., Kyvsgaard, N., Thamsborg, S.M. Munyua, W.K., **Gathuma, J.M.**, Borgh, H.O. and Nansen, P. (1996). Prevalence and intensity of helminth and coccidial infections in dairy cattle in central Kenya. Proceedings of the 5th Seminar on the DANIDA-funded RHRP in Harare, Zimbabwe. January 18-24, 1996.
7. Gitau, T., McDermott, J.J. Kyule, M.N., **Gathuma, J.M.** Kang'ethe, E.K., Kimani, V.W., Kilungo, J.K., Muni R.K., Mwangi, J.M., Otieno, G.O. (1998). Agro-ecosystem health: principles and methods used in a high-potential tropical agroecosystem. In "Agroecosystems, Natural resource management and human health research in East Africa: Proceedings of an IDRC-ILRI international workshop held at ILRI, Adis Ababa, Ethiopia, 11 – 15 May 1998. Jabar, Peden, Monammed-Saleem and Li Pun (eds). ILRI, Nairobi, Kenya.

8. Maingi, N., Thamsborg,S.M., Gichohi,V.M., Munyua,W.K., **Gathuma, J.M.**and Nansen, P. (1995).Effectiveness of thhe strategic use of closantel and albendazole in controlling gastrointestinal nematodes of sheep in Kenya. 15th International Conference of the WAAAVP, Yokohama, Japan. 30th August-2nd September, 1995.
9. Maingi, N., Bjorn, H.,Thamsborg,S.M.,Nansen,P., Munyua,W.K. and **Gathuma , J.M.** (1995). Gastrointestinal helmith control practices and anthelmintics resistance on farms in Nyandarua District of Kenya. 4th Seminar of the DANIDA-funded Ruminant Helminth Research Project. Arusha, Tanzania, January 23-27, 1995.
10. Kitala, P.M., McDermott, J.J., Kyule, M.N. and **Gathuma, J.M.** (1993). Features of dog ecology relevant rabies spread in Machakos District, Kenya. In Proceedings of the International Conference on rabies in Southern and Eastern Africa. Pretoria, South African Journal of Veterinary Research.
11. Waruiru,R.M., Weda,E.H., Borgh,H.O., Munyua, W.K., **Gathuma,J.M.**, thamsborg, S.M. and Nan sen,P. (1995).The effects of anthelmintics treatment on nematode parasitism and liveweight gains of dairy calves under field conditions in Kenya. In: Proceedings of the 4th Seminar on the DANIDA –funded RHRP in Arusha, Tanzania. January 23-27, 1995.
12. Waruiru,R.M., Weda,E.H., Borgh,H.O., Munyua,W.K., **Gathuma,J.M.**, Thamsborg, S.M. and Nansen,P. (1994). Comparative efficacy of morantel sustained release trilaminar bolus and conventional anthelmintics treatment against gastrointestinal nematodes in dairy calves in Kenya.In: Proceedings of the VIII ICOPA Conference, Izmir-Turkey, October 10-14, **1**: 221.
13. Olsvik, O., Senerwa, D., **Gathuma, J.M.** and Mutanda, L.N. (1989). An outbreak of enteropathogenic *Escherichia coli* 0111:HNT among preterm neonates in a hospital in Nairobi, Kenya. Proceedings of the 3rd African Conference on diarrheal Diseases. P. 30 – 34.
14. Senerwa, D.D., Olsvik, O., Mutanda, L.N., Lindqvist, K.J., **Gathuma, J.M.**, Fossum, K. and Wachsmuth, K. (1989). Enteropathogenic *Escharichia coli* serotype 0111:HNT isolated from preterm neonates in Nairobi, Kenya, In O. Olsvik (ed). Genetic characterization of bacteria: Use of plasmid profiles, restriction endonuclease digest patterns and DNA hybridization, with examples from gram-negative bacteria. The Veterinary College of Norway, Oslo, Norway.
15. Kyule, M.N., Gathura, P.B., **Gathuma, J.M.**, McDermott, J.J. and Okelo, G.B.A. Patterns of human hydatid disease in Kenya, 1979 – 1988. Paper presented at Infectious Diseases. Nairobi, Kenya, 7th – 11th June, 1992.
16. Gathura, P.B. and **Gathuma, J.M.** The characterization and use of heat-stable cysticercus tenuicollis fluid antigen for the diagnosis of human hydatidosis. Paper

- presented at the 5th International Congress for Infectious Diseases. Nairobi, Kenya, 7th – 11th June 1992.
17. Senerwa, D.M., Mutanda, L.N., Olsvik, O and **Gathuma, J.M.** An outbreak of diarrhea due to enteropathogenic *Escherichia coli* in a nursery ward. Proceedings of the 3rd African Conference on Diarrheal Diseases (AFCODD), Nairobi, 10 – 13 April, 1989.
 18. Senerwa, D.M., Mutanda, L.N. Olsvik, O. and **Gathuma, J.M.** An outbreak of enteropathogenic *Escherichia coli* (Fourth African Diarrhea Conference held in Nairobi, 10th – 13th April 1989 – in press).
 19. Senerwa, D.N., Mutanda, L.N., Olsvik, O. and **Gathuma, J.M.** Colonization patterns and mortality in pre-term babies with enteropathogenic *Escherichia coli* 0111:HNT strain S. (Fourth African Diarrhea Conference held in Nairobi, 10th – 13th April, 1989 – in press).
 20. Gathura, P.B., Njeruh, F.M. **Gathuma, J.M.** and Okelo, G.B.A. An evaluation of the diagnostic value of double diffusion (DD) tests based on “Antigen 880” and “Arc-5” in human hydatidosis. KEMRI/KETRI Conference, February, 1989.
 21. Kagiko, M.M. and **Gathuma, J.M.** Cross-reactions between antigens of hydatid cyst fluid and other cestodes and their implications in the serological diagnosis of hydatidosis in cattle. XII International Congress for Tropical Medicine and Malaria. Amsterdam, Netherlands, 18th – 23rd September, 1988.
 22. Njeruh, F.M., **Gathuma, J.M.**, Okelo, G.B.A. and Tumboh-Oeri, A.G. A comparative study of indirect haemagglutination (IHA) test and enzyme-linked immunosorbent assay (ELISA) based on a thermo-stable lipoprotein in diagnosis of human hydatidosis in Kenya. XII International Congress for Tropical Medicine and Malaria. Amsterdam, Netherlands, 18th – 23rd September, 1988.
 23. Gathura, P.B., Njeruh, F.M., **Gathuma, J.M.**, Okelo, G.B.A and Tumboh-Oeri, A.G. A comparative study of enzyme-linked immunosorbent assay (ELISA) using the two most immuno-reactive antigens of hydatid fluid, 1988. Read in the 9th Annual KEMRI/KETRI Scientific Conference, 5th – 9th February, 1988.
 24. Njeruh, F.M., **Gathuma, J.M.** and Tumboh-Oeri, A.G. A comparative study of indirect haemagglutination (IHA) test and enzyme-linked immunosorbent assay (ELISA) in the diagnosis of hydatidosis in man. Proceedings of the 7th Annual KEMRI/KETRI Scientific Conference, 1986, Pages 125 – 129.
 25. Kagiko, M.M., Lindqvist, K.J. and **Gathuma, J.M.** Immunological characterization of the antigens of hydatid cyst fluid. Proc. IX International Congress of Infectious and Parasitic Diseases, 1986 (in press)
 26. Njeruh, F.M., **Gathuma, J.M.** and Tumbo-Oeri, A.G. Comparative study of the indirect haemagglutination (IHA) test and enzyme-linked immunosorbent assay

- (ELISA) in the diagnosis of hydatidosis in man. Proceedings of the KETRI/KEMRI Conference, Nairobi, Kenya, February, 1986.
27. Nyaga, P.N., **Gathuma, J.M.** and Otwel, J.A. The impact of toxoplasmosis and related protozoa as zoonoses in Tropical Africa – A review. Paper read at the VII International Congress of Protozoology, Nairobi, 22nd – 29th June 1985.
 28. **Gathuma, J.M.** Control of Protozoal diseases in eastern Africa. The case for environmental considerations. Paper read at VII International Congress of Protozoology, Nairobi, 22nd – 29th June 1985.
 29. McPherson, C.N.L., Zeyhle, E., Romig, T., Mwangi, M., Rees, P., McPherson, C., Wachira, T., Cheruiyot, H., Gathura, P.B., **Gathuma, J.M.** and Kinoti, G.K. (1985). *Echinococcus* – Research for appropriate control techniques for Turkana. Proceedings of the KEMRI/KETRI Conference, February 4th – 8th, 1985, Nairobi, Kenya.
 30. Wachira, T.M., **Gathuma, J.M.**, Cheruiyot, H and McPherson, C.N.L. (1985). Comparative morphological study of 35 day-old *Echinococcus granulosus* of sheep, cattle and goat origin in Kenya. Proceedings of the KEMRI/KETRI Conferences, February, 4th – 8th 1985, Nairobi, Kenya.
 31. **Gathuma, J.M.** Assessment of Animal Health and Disease trends through meat inspection. (Paper presented at the Kenya Veterinary Association Annual Conference, 29th – 30th April, 1982 at ILRAD, Nairobi.
 32. Lindquist, K.J., **Gathuma, J.M.** and Kaburia, H.F.A. (1982). Analysis of blood meals of haematophagous insects by haemagglutination inhibition and enzyme immunoassay. Proceedings of the 3rd Annual M
 33. Nyaga, P.N., Kagiko, M.M. and **Gathuma, J.M.** Some observations on the hygiene and antimicrobial drug sensitivity of organisms in traditionally fermented and fresh milk from nomadic herds in Kenya. (Abstract). Paper read at the 6th International Conference on Global Impacts of Applied Microbiology, Lagos, Nigeria, 31st August – 6th September 1980.
 34. **Gathuma, J.M.** Immunodiagnosis of *C. bovis* in cattle. Paper presented at the Kenya Veterinary Association Scientific meeting at the Animal Health and Industry Training Institute (AHITI), Nairobi, Kenya on 12th November, 1976.
 35. Nyaga, P.N., Kaminjolo, J.S., **Gathuma, J.M.**, Omuse, J.K., Nderu, F.M.K. and Gicho, J.M. (1981). Prevalence of antibodies to Parainfluenza-3 (PI3) virus in various wildlife species and domestic cattle sharing the same habitats in Kenya. Paper read at the Second International Conference on the Impact of Viral Diseases on the Development of African and Middle East countries held in Nairobi, Kenya, December 1st – 6th, 1980

36. **Gathuma, J.M.** and Kagiko, M.M. (1980). Veterinary Science and Human Health paper read at the 9th Council meeting of the Commonwealth Medical association and the 9th Annual Scientific Conference of the Kenya Medical Association, Nairobi, Kenya, 25th – 29th March, 1980.

CONFERENCES/WORKSHOPS ATTENDED

1. Pastoralist Communities Harmonisation Initiative meeting, Mbale, Uganda, 19th – 25th May, 2001.
2. Regional Symposium on Dairy Cattle Breeding in East Africa: Sustainable Artificial Insemination (AI) Service, Nairobi, 20th – 21st March, 2000.
3. Workshop on Plan for the proposed improvement of animal health delivery project for Kenya's ASAL – Nairobi, Kenya, 30th March – 1st April.
4. 6th International Society for Veterinary Epidemiology and Economics, Ottawa, Canada, 12th – 16th August, 1991.
5. Pan Commonwealth Veterinary Conference Harare, Zimbabwe, 10th – 14th September, 1990.
6. KEMRI/KETRI Scientific Conference, 5th – 9th February, 1988.
7. KEMRI/KETRI Scientific Conference, February, 1986.
8. VII International Congress of Protozoology, Nairobi, 22nd – 29th June, 1985.
9. International Conference of the Application of Ruminant Immunology to the Control of Bovine Diseases, Nairobi, Kenya, 26th – 30th September, 1983.
10. Annual Scientific Conference of the Kenya Veterinary Association, Nairobi, Kenya, 28th – 29th April, 1983 (member of the organising committee).
11. Fourth Annual Medical Scientific Conference of the Kene, Nairobi, Kenya, 7th – 11th February, 1983.
12. Annual Scientific Conference of the Kenya Veterinary Association, ILRAD, Nairobi, Kenya 29th – 30th April, 1982 (member of the organising committee).
13. Third Annual Medical Scientific Conference of the Kenya Medical Research Institute and the Kenya Trypanosomiasis Research Institute, Nairobi, Kenya, 1st – 5th February, 1982.
14. Eighth International Symposium of the World association of Veterinary Food Hygienists, Dublin, Ireland, 30th August – 4th September, 1981.

15. A “Symposium on Animal Disease in Kenya” held in Nairobi, Kenya, on 8th – 9th May, 1980, organised by the National Council for Science and Technology, (Introduced the topic “Research Priorities and Institutional Arrangements for Research” for discussion and finally summarised the discussion on the topic).
16. International Workshop on “Wildlife Disease Research and Economic Development”, Nairobi, Kenya, 8th – 9th September, 1980.
17. International Conference on “Impact of Animal Diseases Research and Control on Livestock Production in Africa”, Nairobi, Kenya, 1st – 5th September, 1980.
- 18.** Ninth Council meeting of the Commonwealth Medical Association and 9th Annual Scientific Conference of the Kenya Medical Association, Nairobi, Kenya, 25th – 29th March, 1980.

MEMBERSHIP OF ASSOCIATIONS AND OTHER PROFESSIONAL BODIES

1. Member, Kenya Veterinary Association (formerly member of the Scientific and Publications sub committees).
2. Member, International Society for Veterinary Epidemiology and Economics.
3. Member, World Association of Veterinary Food Hygienists.
4. Formerly Member, Kenya Bureau of Standards Technical Committee on Meat and Meat Products.
5. Formerly Member, Ad hoc committee on Hydatid Disease Control in Kenya.
6. Formerly Member, Kenya Veterinary Board.
7. Formerly member, National Centre Research Committee, National Research Laboratory, Kabete.
8. Formerly member, Editorial Board of the Kenya Veterinarian (Editor from April 1982 to April 1986).
9. Formerly Member, Management Committee, Agricultural Research Fund, Kenya Agricultural Research Institute.
10. Formerly member, KETRI Board of Management.

OTHERS

Formerly Member, Board of Governors, Kambaa Technical High School, Nyandarua.

<u>Languages</u>	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
English	Good	Good	Good
Kiswahili	Good	Good	Fair
Kikuyu	Good	Good	Good