CURRICULUM VITAE



*<u>Name</u> : **Abdelmalik Ibrahim Khalafalla**

*Nationality: Sudanese

*Date of birth: February 6, 1960.

* Marital status: Married with Four children

*<u>Qualifications</u>: B.V.M& S(Baghdad; 1984); M.V.Sc.(Khartoum, 1987); PhD

(Khartoum, 1997); AvH Fellowship (Germany; 2003).

*Education:

- Post doctoral studies in Tuebingen, Germany, April 2001-January 2003.

-Ph D degree from Faculty of Veterinary Medicine, University of Khartoum, 1997.

-Master degree from Faculty of Veterinary Medicine, University of Khartoum, 1987.

-University education at Faculty of Veterinary Medicine, University of Baghdad, 1984.

-Secondary education at Khartoum North Higher Secondary School :1976-1979.

-Primary and Intermediate education at Halfayat El Muluk Schools: 1967-1973 & 1973-1976.

* Present title: Professor of Veterinary Medicine

* Present Job:

Research Scientist, Camel Research Centre, King Faisal University, Kingdom of Saudi Arabia

* Present address:

Camel Research Centre, King Faisal University, P.O. Box 1757, Al Hassa, Kingdom of Saudi Arabia Tel. +9663 5816600 (Ext.2341) Fax +9663 5893558 Mobile +966548643191

*Professional experience:

- Research Scientist, Camel Research Centre, King Faisal University, Kingdom of Saudi Arabia, June 2012-now

-Head, Camel Research and Development Programs, The Arab Centre for Studies on Arid Zones and Dry Lands (ACSAD). I am responsible of executing and follow up of camel developmental projects in Arab countries including a technical and feasibility study for the establishment of a Camel ranch in republic of Algeria and a project entitled Assessment and improving camel milk production and marketing in Sudan, Algeria and Morocco, funded by the International Fund for Agricultural Development (IFAD). Besides, I am also conducting research on camel production systems and diseases in Syria and fattening camel calves with agricultural byproducts. I am also responsible for the Animal Health and Trans-boundary diseases project in ACSAD. Duties involve set up and monitoring Health Programs to control diseases and making routine health status examinations of sheep, goats and camels in two research stations in Syria.

-Director, Camel Research Center, Faculty of Veterinary Medicine, University of Khartoum, March 2007- Dec 2009.

-Head, Department of Microbiology, Faculty of Veterinary Medicine, November 2006-March 2007.

- May 2004: promoted to Full Professor.

- Post doctoral fellow, Department of Immunology, Federal Research Center for Virus Diseases of Animals, Tuebingen, Germany, 2001-2003. Title of the research proposal was Molecular Characterization of Camel Contagious Ecthyma Virus.

Techniques learned include Viral Nucleic acid extraction, Polymerase chain reaction [PCR], Restriction enzyme analysis, Southern hybridization, western hybridization and sequencing and phylogenetic analysis.

-2000-2005: Associate Professor, Department of Microbiology, Faculty of Veterinary Medicine, University of Khartoum.

1997-2000: Assistant Professor, Department of Microbiology, Faculty of Veterinary Medicine, University of Khartoum.

-1995-1997: Lecturer, Department of Microbiology, Faculty of Veterinary Medicine, University of Khartoum.

-1989-1995: Research Scientist, Central Veterinary Research Laboratories, Animal Resources Research Corporation, Soba.

-1986-1989: Veterinary Officer, Northern State, Sudan. Duties included diagnosis of livestock diseases and treatment, meat inspection, poultry production and veterinary extension.

-1984-1986: Master of Science's student at Department of Microbiology, Faculty of Veterinary Medicine, University of Khartoum.

*Teaching:

1- Teaching Veterinary Microbiology Course to 3rd class Veterinary undergraduate students, Faculty of Veterinary Medicine, University of Khartoum. I have taught this course from 1996 until 2009.

2- Teaching Advance General Virology and Advance Special Virology courses to Master students, Department of Microbiology, Faculty of Veterinary Medicine, University of Khartoum, 2003-2009.

3- Teaching Molecular Biology course to Master students, Department of Microbiology, Faculty of Veterinary Medicine, University of Khartoum, 2003-2009.

4- Teaching Human Virology course to Master students, Faculty of Basic Medical Laboratories, Omdurman Islamic University, 2006-2008.

5-Teaching Human Virology course to undergraduate students, Faculty of Medical Sciences, Ahlia University, Omdurman, Sudan, 2007-2009.

6- Teaching Microbiology and Molecular Biology courses to under and post graduate students at many universities and institutes in Sudan, 1995-2009.

* Diagnosis: I am was fully engaged in diagnosis of infectious diseases in animals brought into the Faculty Hospital.

*Teaching interests:

1-Veterinary Microbiology (Virology, Bacteriology, Immunology).

2-Veterinary Infectious diseases.

3-Human Microbiology.

4-Molecular Biology (Molecular Virology, Microbial Molecular Biology, Practical Diagnostic Molecular Biology).

5- Immunology

6-Camel Diseases.

*<u>Research Experience</u>

Diversified practical and research experience in microbiology, with emphasis on viral diseases of animals. Have extensively applied cell culture, microscopy and molecular approaches to study viral pathogens. Experience in teaching, administration, and supervision of lab personnel and students (undergraduate and graduate). Techniques I employed include histopathology, electron microscopy, embryonated eggs and cell culture, immunoflourecsence, ELISA, restriction enzyme analysis, molecular hybridization, PCR, molecular cloning, DNA sequencing, LAMP and phylogenetic analysis.

*Graduate advising:

1- Ghada El Dirdiri (MSc., completed 2000) 2-Omer M.El Hassan (MVSc. completed 2001) 3-Khalid Abdel Rahman (MVSc. completed 2001) 4- Wegdan Hassan (MVSc. completed 2001) 5-Sana Awad Abdel Aziz (MVSc. completed 2001) 6-Intisar Kamil Saeed (MVSc. completed 2002) 7- Yahia Hassan Ali (PhD. completed 2003) 8-Nagwa Osman El Shafie (MVSc. completed 2004) 9-Maaz Majzoub (MSc. completed 2004) 10-Niema Osman (MSc., completed 2005) 11-Hanan El Sheikh (co-supervisor) (MSc., completed 2005). 12- Mohammed Gasim Omer (MSc., completed 2005) 13-Ahmed Zein Al Abdeen (MSc., completed 2005) 14- Nada Ibrahim (MSc., completed 2006) 15-Inas Ibrahim Habiballa (MSc., completed 2006) 16-Luai Mohamed El Hassan (MSc., ., completed 2006) 17-Rami Fathi (MSc., completed 2006) 18-Ali Abu Obeida (MSc., completed 2006) 19- Abu Bakr Mustafa Osman (MSc., completed 2006) 20- Muawia Al Eid Hamad (MSc., completed 2007) 21- Azzam Ali (Msc., completed 2008) 23- Maaz Magzoub Abdel Latif (PhD., completed 2009) 24- Intisar Kamil Saeed (PhD., completed 2009). 25-Rasha Awad (MSc., completed 2010).

26-Nagwa Ali El Mardi (MSc., completed 2010).

<u>* International organizations</u>: Secretary General of ISOCARD (International Society of Camelids Research and Development), <u>www.isocard.org</u>. as from March 2009.

* Research Grants Received:

1-Internationally supported projects:

1-FAO/IAEA Project on Assessment of Effectiveness of Vaccination Against Newcastle Disease in Village Poultry in Africa. Started 1999 and ended 2004. Fund received 5X 4 Years = 20,000 USD.

2-International Foundation for Science (IFS) project on Pox and pox-like diseases of camels. Started 1994 ended 1997, renewed 1998 ended 2001. Fund received : 12,000 X 2 years= 24,000 USD

3- Introduction of Molecular Biology Techniques for Improving Diagnosis of Animal Diseases and Study of Genetic Properties of Isolated Viruses in Sudan. Project funded by Alexander von Humboldt Foundation / Germany through Molecular Biology Equipment Donation. Started 2002 and ended 2005. Fund received as equipment donation totaled 20,000 Euros.

2- Regionally and locally supported projects:

1- Role of Passerformes Birds in Transmission of Newcastle Disease, MVSC. Research project funded by University of Khartoum, 1985.

2- Improving diagnosis of Foot and Mouth Disease in Sudan by Introduction of ELISA and PCR. A project Supported by The Arab Organization for Agricultural Development. Fund received: 2,000 USD. Started 2003 ended 2004.

3- Improving Diagnosis of Animal viral Diseases in Sudan through Application of Molecular Biology Techniques. Supported by Ministry of Higher Education and Scientific Research, Sudan. Started 2004. Fund received : 600, 000 Sudanes Dinars.

4- Production and use of a killed vaccine against Infectious bursal disease (IBD) from a recent local isolate. Supported by Ministry of Higher Education and Scientific Research, Sudan. Started 2004. Fund received : 450, 000 Sudanese Dinars.

*Conferences and workshops:

1- Poultry Viral Vaccines in Africa. FAO workshop, Central Veterinary Research

Laboratories, Soba. 1-5 September, 1989.

2- The 8th Arab Veterinary Conference, March 24-28, 1998. Friendship Hall, Khartoum, Sudan

3- The Third Annual Meeting for Animal production Under Arid Conditions. May 2-3, 1998 Intercontinental Hotel, Al Ain, United Arab Emirates.

4- The 4th Scientific Conference, National Centre for Research. April 8-10, 1999. Friendship Hall, Khartoum, Sudan. 5- The International Workshop on: The Young Camel, Future of Camel Stock. 24-26October 1999, Paais des Congres, Ouarzazate, Morocco.

6-The Second Coordination Meeting of the FAO/IAEA Co-ordinated Research Program on Assessment of the effectiveness of vaccination strategies against Newcastle Disease and Gumboro Disease using immunoassay-based technologies for increasing farmyard poultry production in Africa. 4-8 September, 2000, Morogoro, Tanzania.

7- The 9th Arab Veterinary Conference, 14-16 November, 2000, Baghdad, Iraq.

8-The 10th International Conference of the Association of International Tropical Veterinary Medical Institutes, August, 20-23, 2001, Copenhagen, Denmark.

9-FAO/IAEA International Symposium on Application of Gene-based Technologies for Improving Animal Production and Health in Developing Countries, 6-10 October, 2003, Vienna, Austria.

10-The Final Research Co-ordination Meeting on the FAO/IAEA Co-ordination Research Program on the Assessment of the effectiveness of vaccination strategies against Newcastle Disease and Gumboro Disease using immunoassay-based technologies for increasing farmyard poultry production in Africa, 24-28 May, 2004, IAEA, Vienna.

11-The 11th International Conference of the Association of Institutions of Tropical Veterinary Medicine, August, 23-27, 2004, Sunway Lagoon Resort Hotel, PJ, Malaysia.

12- The International Conference on Emerging Infectious Diseases. Faculty of Medicine, United Arab Emirate University, Al Ain, UAE, 26th March- April 1, 2005.

13-First Conference of the International Society of Camelids Research and Development (ISOCARD), Al –Ain Rotana Hotel, Al Ain, United Arab Emirates, April 15 -17, 2006.

14- The International Conference on Camels, Al Gassem University for Agriculture and Veterinary Medicine, Al Gassem, Saudi Arabia, May 10-12, 2006.

15- The 12th International Conference of the Association of Institutions of Tropical Veterinary Medicine, Montpellier, France 20-22 August 2007,

16-Second Conference of the International Society of Camelids Research and Development (ISOCARD), Djerba, Tunis, March 11 -14, 2009.

17-Third Conference of the International Society of Camelids Research and Development (ISOCARD), Muscat, Sultanate of Oman, January 28 – February 1, 2012.

Consultancy activities:

- 1- Was scientific consultant for two large Poultry and one dairy farms in Khartoum.
- Was member of the High Emergency Committee on Avian Influenza of the Ministry of Animal Resources and Fisheries, Sudan 2005-2007.
- 3- Was member of the Consultancy Committee on Control of Infectious Diseases of The Ministry of Animal Resources and Fisheries, Sudan,2007-2009
- 4- Headed the Consultancy Group on Foot and Mouth Disease of The Ministry of Animal Resources and Fisheries, Sudan, 2006-2009.
- 5- Member of the *ad hoc* group on diseases of camelids, Office International of Epizootics (OIE), Paris, France.

Editorials:

1- Member of editorial board of The Arab Journal for Arid Environment published by The Arab Centre for Studies on Arid Zones and Dry Lands (ACSAD).

*List of publications:

- Abdelmalik Khalafalla, Ibrahim El-Sabagh, Khalid Al-Busada, Abdullah Al-Mubarak, Yahia Ali (2015). Phylogenetic analysis of eight Sudanese camel contagious ecthyma viruses based on B2L gene sequence. *Virology Journal* 2015, 12:124 (12 August 2015).
 - Khalafalla AI['] Al-Busada KA, El-Sabagh IM (2015). Multiplex PCR for rapid diagnosis and differentiation of pox and pox-like diseases in dromedary Camels. Virol J. 2015 Jul 7;12:102. doi: 10.1186/s12985-015-0329-x.
 - Khalafalla AI, Xiaoyan Lu, Abdullah I.A. Al-Mubarak, Abdul Hafeed S. Dalab, Khalid A.S. Al-Busadah, and Dean D. Erdman (2015). MERS-CoV in Upper Respiratory Tract and Lungs of Dromedary Camels, Saudi Arabia, 2013–2014. Emerging Infectious Diseases. 2015 Jul;21(7):1153-8. doi:10.3201/eid2107.150070
 - Saeed IK, Ali YH, AbdulRahman MB, Mohammed ZA, Osman HM, Taha KM, Musa MZ, <u>Khalafalla AI</u> (2015).Mixed infection of peste des petits ruminants virus (PPRV) and other respiratory viruses in dromedary camels in Sudan, an abattoir study. Trop Anim Health Prod. Jun;47(5):995-8. doi: 10.1007/s11250-015-0798-3. Epub

2015 Apr 24.

- 5. Abdellatif, M.M, Ibrahim, A.A. & <u>Khalafalla</u> A.I (2014). Development and evaluation of a live attenuated camelpox vaccine from a local field isolate of the virus. *Rev. sci. tech. Off. int. Epiz.*, 2014, 33 (3), 831-838
- 6. Ali, Y.H., Intisar, K. S and <u>Khalafalla</u>, A. I (2014).Outbreaks of Peste des petits ruminants in two different localities in Sudan. Journal of Veterinary Medicine and Animal Health Vol.6 (6), 174-177.
- 7. Intisar KS, Ali, YH, Taha, K M, Musa, MZ and <u>Khalafalla</u>, AI (2014). Isolation of some respiratory viruses from camels. Int. J. Livest. Prod. Vol.5 (1), 1-5.
- Jere KC, Esona MD, Ali YH, Peenze I, Roy S, Bowen MD, Saeed IK, Khalafalla AI, Nyaga MM, Mphahlele J, Steele D, Seheri ML (2013). Novel NSP1 genotype characterised in an African camel G8P[11] rotavirus strain. Infect Genet Evol. 21C:58-66.
- Abdellatif MM, Salim B, Ibrahim AA, Asil T, <u>Khalafalla AI</u> (2013). Analysis of TK and C18L genes of wild-type and cell culture passaged camelpox virus. <u>Virol Sin.</u> 28(4):239-241.
- Sagr, I., <u>Khalafalla, A.I.</u>, Mahmoud, M.S.A., Abdo, Z., Hemsi, O & Hussein, A (2013). Socio- economic Study on Camel Breeders in Syria (Book in Arabic). Published by The Arab Center for Studies on Arid Zones and Dry Lands (ACSAD), Damascus.
- 11. <u>Khalafalla, A.I</u> (2013). Camel Production Prospects in the Arab Countries. In: Agab, H & Al Asaad, A (editors): Deliberations and Papers Presented to the Second Coordination Meeting of the Project Assessment and Improving Camel Milk Production and Marketing in Some Arab Countries, Rabat, Morocco, 29 April -3 May, 2012. Published by The Arab Center for Studies on Arid Zones and Dry Lands (ACSAD), Damascus, pp 6-15.
- 12. Mahmoud, M.S.A., <u>Khalafalla, A.I</u>& El Bashier, M.E.M (2013). Socioeconomic Characteristics of Camel Milk Consumers in Sudan. In: Agab, H & Al Asaad, A (editors): Deliberations and Papers Presented to the Second Coordination Meeting of the Project Assessment and Improving Camel Milk

Production and Marketing in Some Arab Countries, Rabat, Morocco, 29 April -3 May, 2012. Published by The Arab Center for Studies on Arid Zones and Dry Lands (ACSAD), Damascus, pp 16-47.

- <u>Khalafalla, A.I</u> and Bornstein, S (2012). Emerging Infectious Diseases of Camelids. Proc. Third Conference of the International Society of Camelids Research and Development (ISOCARD), Muscat, Sultanate of Oman, January 28 – February 1, 2012, Keynote Presentation, pp.65-74.
- Abdellatif, M. M; Mysaa, A. M; <u>Khalafalla, A. I</u> and EL Tigani-Asil, E. A (2012). Improving Thermostability of A Candidate Live Attenuated *Camelpox* Vaccine. Sudan Journal of Science and Technology Vol. 13, No.1, 6-11.
- Ure, A. E., Elfadl, A.K., <u>Khalafalla, A. I.</u>, Gameel, A. A. R., Dillner, J. and O. Forslund (2011). Characterization of complete genomes of Camelus dromedarius papillomavirus 1 and 2. Journal of General Virology. 2011 92(8):1769-77.
- Kwiatek,O, Ali,Y.H , Intisar, K. Saeed, <u>Khalafalla ,A.I</u>, Ishag, O, Abu Obeida, A , Abbas,Z , Albina, E, Lancelot, R, Libeau, G (2011). Asian lineage of peste des petits ruminants virus, Africa. Emerging Infectious diseases. 2011 Jul;17(7):1223-31.
- 17. Ali Y. H, <u>Khalafalla A.I</u>, Intisar, K. S Salwa A. E Steele A.D (2011). Rotavirus infection in Human and Domestic Animals in Sudan. Journal of Science and Technology, 12 (4) ,pp:58-63
- <u>Khalafalla AI</u>, Saeed IK, Ali YH, Abdurrahman MB, Kwiatek O, Libeau G, Obeida AA, Abbas Z (2010). An outbreak of peste des petits ruminants (PPR) in camels in the Sudan. Acta Trop. 2010 Nov;116(2):161-5.
- <u>Khalil AA</u>, <u>Khalafalla AI</u> (2010). Analysis and effect of water sources used as diluents on Newcastle disease vaccine efficacy in chickens in the Sudan. Trop Anim Health Prod. 43:295-297.

- Intisar KS, Ali YH, <u>Khalafalla AI</u>, Mahasin EA, Amin AS (2010). Respiratory syncytial virus infection of camels (Camelus dromedaries). Acta Trop. 113(2):129-33.
- Intisar KS, Ali YH, <u>Khalafalla AI</u>, Rahman-Mahasin EA, Amin, AS &Taha,KM (2010). The first report on prevalence of pestivirus infection in camels in Sudan. Trop. Anim Health Prod. 42:1203-1207.
- Intisar1,K.S. Ali, Y.H, <u>Khalafalla, A. I</u>, Taha, K. M. and M. E. A. Rahman (2010). Adenovirus type 3 infections in camels in Sudan. African Journal of Microbiology Research Vol. 4(13), 1356-1358.
- Intisar KS, Ali YH, <u>Khalafalla AI</u>, Rahman-Mahasin EA, Amin, AS (2009). Respiratory infection of camels associated with parainfluenza virus 3 in Sudan. Journal of Virological Methods 163(1):82-86.
- 24. Saeed IK, Ali YH, <u>Khalafalla AI</u>, Rahman-Mahasin EA (2009). Current situation of Peste des petits ruminants (PPR) in the Sudan .Trop. Anim Health Prod. 42(1):89-93.
- 25. Sheikh Ali HM, <u>Khalafalla AI</u>, Nimir AH (2009). Detection of camel pox and vaccinia viruses by polymerase chain reaction. Trop. Anim Health Prod. 41(8):1637-41.
- 26. Intisar KS, Ali YH, <u>Khalafalla AI</u>, Mahasin EA, Amin AS (2009).Natural exposure of Dromedary camels in Sudan to infectious bovine rhinotracheitis virus (bovine herpes virus-1). Acta Trop. 111(3):243-6.
- 27. Sheikh Ali HM, Nimir AH, <u>Khalafalla AI</u> (2009). Growth characteristic of Camel pox and Vaccinia viruses in embryonated eggs and cell culture. Trop. Anim Health Prod. 41(3):393-6.
- 28. Ali, Y.H; <u>Khalafalla, A.I</u>; El Amin, M.A; Peenze, I & Steele, A.D (2008). Detection and Isolation of group A Rota viruses from camel calves in the Sudan. Veterinarski Arhiv 78 (6), 477-485.
- 29. <u>Khalafalla, A.I</u> and Ali, Y.H (2007). Observations on Risk Factors Associated with Viral Diseases of Camels in Sudan. Proceedings of the 12th International Conference of the Association of Institutions of Tropical Veterinary Medicine, Montpellier, France 20-22 August 2007, pp 101-105.

- 30. Hashim, WM., Galal, MY., Ali, AM., <u>Khalafalla, AI</u>., Hamid, SA., Mohamed, KA. Dromedary camels in Sudan, types and sub types, distribution and movement (2015). International Journal of Pharmaceutical Research & Analysis, 5(1), 8-12.
- 31. <u>Khalafalla, A.I</u>, Rziha, H.J and Buettner, M (2006). Isolation and Molecular Characterization of the Camel Contagious Ecthyma Virus. Proceedings of The International Conference on Camels, Al Gassem University for Agriculture and Veterinary Medicine, Al Gassem, Saudi Arabia, May 10-12, 2006, p 387 – 396.
- Ali, Y.H; <u>Khalafalla, A.I</u>; El Amin, M.A; Peenze, I & Steele, A.D (2005). Rotavirus-Associated Camel Calf Diarrhea in Sudan. Journal of Animal and Veterinary Advances 4 (3): 401-406.
- Ali, Y.H; <u>Khalafalla, A.I</u> & El Amin, M.A (2005). Epidemiology of camel calf diarrhea in Sudan: Seroprevalence of camel rotavirus infection. Journal of Animal and Veterinary Advances 4 (3): 393-397.
- 34. Abdel-Latif, M. M. & <u>Khalafalla, A.I</u> (2005). Detection by PCR of Multiple Subgroups of Avian Leukosis Virus (ALV) in Broilers in the Sudan. Journal of Animal and Veterinary Advances 4(3): 407-413.
- 35. El Shafie, N.O; <u>Khalafalla,A.I</u>, Ibrahim,A.A & N.A.Ashor (2005). Investigation on Viral Arthritis in Broiler Chickens in Khartoum, Sudan. Journal of Animal and Veterinary Advances 4 (1): 145-149.
- 36. Ali, Y.H; <u>A.I.Khalafalla</u>; M.E.Gaffar; I. Peenze & A.D.Steele (2004). Detection and isolation of group A rotavirus from camel calves in Sudan. Proceedings of the 11th International Conference of the Association of International Tropical Veterinary Medical Institutes, August, 23-27, 2004, Sunway Lagoon Resort Hotel, PJ, Malaysia, pp 302-304.
- 37. <u>Khalafalla, A.I</u> (2004). Biological properties of camel contagious ecthyma virus. Proceedings of the 11th International Conference of the Association of International Tropical Veterinary Medical Institutes, August, 23-27, 2004, Sunway lagoon Resort Hotel, PJ, Malaysia, pp 278-280.
- 38. <u>Khalafalla, A.I</u>;S.A.Abdelaziz; S.M.El Hassan (2006). Increasing family poultry production in the Sudan through Newcastle disease control and improving

housing. In: Improving Farmyard Poultry Production in Africa: Interventions and Their Economic Assessment. Proceedings of the Final Research Coordination Meeting Organized by the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture and held in Vienna, 24 – 28 May 2004.IAEA-TECDOC-1489, pp 220-227.

- 39. <u>Khalafalla, A.I</u>; W. Hassan; M.El Nur; A.S.Ali (2006). Observations on production, laboratory testing and field application of I-2 thermostable Newcastle disease vaccine in the Sudan. In: Improving Farmyard Poultry Production in Africa: Interventions and Their Economic Assessment. Proceedings of the Final Research Co-ordination Meeting Organized by the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture and held in Vienna, 24 28 May 2004.IAEA-TECDOC-1489, pp 228-235.
- 40. El Hassan. O.M., <u>A.I.Khalafalla</u>, S.M.El Hassan (2004). Detection of antibodies against camel contagious ecthyma in Sudan using passive hemagglutination test (PHT). Journal of Animal and Veterinary Advances 3 (6) 381-387.
- 41. Saeed, I.K; <u>A.I.Khalafalla</u>, S.M.El Hassan, M.A.El Amin (2004). Peste de Petit Ruminants (PPR) in the Sudan: Investigation of recent outbreaks, virus isolation and cell culture spectrum. Journal of Animal and Veterinary Advances 3 (6) 361-365.
- 42. <u>Khalafalla, A.I</u>; M.Büttner and H.-J. Rziha (2005). Polymerase chain reaction (PCR) for rapid diagnosis and differentiation of para-and orthopox virus infections in camels. Applications of Gene-Based Technologies for Improving Animal Production and Health in Developing Countries, pp 335-342. FAO/IAEA Publications, ISBN: 1-4020-3311-7 SPRINGER.
- 43. Sana, A.A; <u>Khalafalla, A.I</u>; Ali, A.S and S.M.Elhassan (2004). Newcastle disease in village chickens in the Sudan. Survey of disease incidence and Isolation of the causative virus . Journal of Animal and Veterinary Advances 3 (1):36-38.
- 44. Hassan, W; <u>A.I.Khalafalla</u> (2003). The effect of age of chickens on the immunogenicity and protective efficacy of Newcastle disease virus

thermostable (I 2) vaccine under Sudan conditions. *Sudan J. Veterinary Research Vol.18, 15-24.*

- 45. Abdelaziz, S.A; <u>Khalafalla, A.I</u> and Ali, A.S (2003). Newcastle disease in the Sudan. Prevalence of antibodies against the disease. Bull. Anim. Hlth. Prod. Afr. 50 No 2,117-119.
- 46. <u>Khalafalla, A.I</u>; G.A. El Dirdiri (2003). Laboratory and field investigation of live attenuated and inactivated camelpox vaccines. Journal of camel Practice and Research,10 No.2, 191-200.
- 47. <u>Khalafalla, A.I</u>; S.Awad and W.Hassan (2002). Village poultry production in the Sudan. In: Characterization and parameters of family poultry production in Africa. Results of a FAO/IAEA Co-ordination Research Program. Backhuys Publishers, Leiden (2002) ISBN 90-5782-094-3, pp 87-93.
- Ali, Y.H; <u>Khalafalla, A.I</u>; Intisar.K.Saeed (2001). Seromonitoring of Infectious bursal disease (IBD) antibodies in some poultry flocks in Sudan. Sudan J. Vet. Sci. & Anim. Husb. 40 (1, 2), 45-55.
- 49. <u>Khalafalla, A.I</u> and S.Awad (2001). Epidemiology of Newcastle disease in village poultry in the Sudan. In: Livestock Community and Environment, Proceedings of the 10th International Conference of the Association of International Tropical Veterinary Medical Institutes, August, 20-23, 2001, Copenhagen, Denmark, pp 181-187.
- 50. <u>Khalafalla, A.I</u> (2000). Camel breeds in the Sudan . *Al Buhuth*, Vol.8. No.1,. Proceedings of the 4th Scientific Conference, National Centre for Research. Khartoum, Sudan. pp 233-241
- 51. <u>Khalafalla, A.I</u> (2000) Camel contagious ecthyma: Risks in young calves . *Revue Elev.vet. Pays trop* 53 (2);173-176.
- 52. <u>Khalafalla, A.I</u> and M.E.H.Mohamed (1998). Camel pox in the Sudan. 2- Some properties of camelpox viruses isolated in the Sudan . *Journal of camel Practice and Research 5 (2) 235-238.*
- <u>Khalafalla, A.I;</u> M.E.H.Mohamed; A. M. K. Sobhi and Mustafa. I. Zeidan (1998). Isolation and identification of camel contagious ecthyma virus in the Sudan. Sudan J. Vet. Sci. Anim. Husb., vol. 37 (1-2), 49-52.

- 54. <u>Khalafalla, A.I;</u> M.E.H.Mohamed and B.H.Ali (1998). Camel pox in the Sudan.
 1- Isolation and identification of the causative virus. *Journal of camel Practice* and Research 5 (2) 229-233.
- 55. <u>Khalafalla, A.I</u>; M.E.H.Mohamed and H.Agab (1998). Serological survey in camels of the Sudan for prevalence of antibodies to camepox virus using ELISA technique. *Journal of camel Practice and Research 5 (2) 197-200.*
- 56. Gitao, C.G; H.Agab and <u>A.I.Khalafalla</u> (1998). Camel Dermatophilosis in Kenya, Sudan and Saudi Arabia. Proceedings of the Third Annual Meeting for Animal production Under Arid Conditions. Vol.2: pp93-107, United Arab Emirates University Press.
- 57. <u>Khalafalla, A.I</u> (1998). Epizootiology of camelpox, camel contagious ecthyma and camel papillomatosis in the Sudan. Proceedings of the Third Annual Meeting for Animal production Under Arid Conditions. Vol.2: pp115-131, United Arab Emirates University Press.
- <u>Khalafalla, A.I</u> (1998). Ortho- and parapox virus infections of camels in the Sudan. Proceedings of the 8th Arab Veterinary Conference, 24-28 March 1998, Friendship Hall, Khartoum, Sudan.pp 276-281.
- 59. <u>Khalafalla, A.I;</u> Z.Abbas and M.E.H.Mohamed (1998). Camel papillomatosis in the Sudan. *Journal of camel Practice and Research 5: 157-159.*
- 60. Gitao, C.G; H.Agab and <u>A.I.Khalafalla</u> (1998). Outbreaks of Dermatophilus congolenses infection in camels (camelus dromedarius) from Butana region in eastern Sudan. *Revue sci. tech. Off. int.Epiz.*, *17*(*3*) 743-748.
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