

# Dr Abdunaser DAYHUM

# **Personal Information**

Faculty of Veterinary Medicine University of Tripoli P.O. Box: 13662 Tripoli, Libya Tel. + 218 (91) 763 3383 E-mail. <u>adayhum@yahoo.com</u> <u>a.dayhum@uot.edu.ly</u> September 1, 2022

ormation	Date and Place of Birth 01/01/1966 Benghazi-Libya Sex Male
	Marital Status Married Nationality Libyan

# **Education**

Ecole National Veterinaire d'Alfort, Maisons Alfort-France 2003-2008

### **Doctorate of Epidemiology**

Quantitative Risk Assessment of Human Salmonellosis linked to the Consumption of Ground Beef.

Ontario Veterinary College, University of Guelph, Ontario- Canada 1995-1997

#### Master of Science in Epidemiology

Preliminary Studies of the Effect of Various Pre-Slaughter Factors on Fecal Shedding and Beef Carcass Contamination with Escherichia coli.

## **Bachelor of Veterinary Sciences (B.V.Sc.)**

Faculty of Veterinary Medicine, University of Tripoli, Tripoli- Libya 1984 – 1990

### **Continuous Education**

Three online non-credit courses authorized by University of California, Irvine and offered through Coursera Initiating and Planning Projects(1/5/2020)Budgeting and Scheduling Projects(12/5/2020)Managing Project Risks and Changes(16/5/2020)

Centre de coopération internationale en recherche agronomique pour le développement (CIRAD) and European Commission for the Control of Foot and Mouth Disease (EuFMD), FAO HQ, Rome Italy – 15-19 July 2019

Training workshop - PROGRAM Qualitative risk mapping and Optimization of national monitoring systems: development of risk-based surveillance protocols (2/2) 40 Hours Training Time

CIRAD and EuFMD, Baillarguet, Montpellier France - April 1-12, 2019	Training workshop - PROGRAM Qualitative risk mapping & Optimization of national monitori development of risk-based surveillance protocols (1/2) 80 Hours Training Time
European Commission for the Control of Foot and Mouth Disease (EuFMD) March 2018	Online Foot-and-Mouth Disease Post Vaccination Monitoring Course 24 Hours Training Time
Universite de Lausanne, Lausanne, Swiss 1 June to 19 October 2017	Course on Surveillance and Control of Rabies 8 ECTS
Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale", OIE Collaborating Centre for Veterinary Training, Epidemiology, Food Safety and Animal Welfare,	Training on Epidemiology-GIS 40 Hours Training Time

### **Working Experience**

Teramo, Italy 7-16 April 2015

Food and Agriculture Organization of the United Nations (FAO)- EuFMD 4 February – 27 December 2021

# Technical Specialist- Epidemiologist (Consultant)-(GCP/GL0/026/EC)

Under the overall supervision of the Deputy Executive Secretary, EuFMD Commission, NSAH, the consultant will work directly with the coordinator of Pillars II of the EC funded Phase V programme in the EuFMD Secretariat and in close consultation with the other EuFMD Staff, Consultants and FAO Officers in Headquarters and the decentralized offices in particular the subregional office for North Africa (FAO-SNE), assisting with Secretariat tasks and the fulfilment of EuFMD objectives. Specifically, the incumbent will under:

- Pillar II programme (risk reduction to EuFMD members from FAST diseases situation in the European neighbourhood)
- o Support with technical assistance to countries neighbouring EuFMD Members (Libya, Sudan, Lebanon, Mauritania) and other countries on request, to achieve progress in their control strategy for FMD and improve their capacity to control FMD and similar Transboundary Animal Diseases (TAOs)
- o Provide assistance to countries in European neighbourhood (Libya and Sudan) for designing and implementing risk-based surveillance for FAST diseases in identified risk locations including the implementation of both syndromic and entomological surveillance

Building on the training provided by CIRAD, assist the implementation of a regular risk information and mapping system in Libya integrating live animals and price values with movement patterns, and assist the national veterinary services in identifying areas/regions at higher risks and the temporal/seasonal variability of these risks

- Provide support upon request to epidemiology analysis and risk assessment for FAST diseases in North Africa and Middle East
- Assist the collection of regular risk information for FAST diseases in Libya and support the implementation of risk information sharing system between Libya, Egypt, Sudan and Jordan
- Provide regular support to the epidemiology network established within the REMESA countries through the participation to online and face-to-face meetings for North Africa and Middle East countries

Food and Agriculture Organization of the United Nations (FAO)- EuFMD 1 April – 31 December 2020

# Technical Specialist -Epidemiologist (Consultant)-(GCP/GLO/026/EC)

Under the overall supervision of the Secretary, EuFMD Commission, AGAH, the consultant will work directly with the coordinator of Pillars II of the EC funded Phase V programme in the EuFMD Secretariat and in close consultation with the other EuFMD Staff, Consultants and FAO Officers in Headquarters and the decentralized offices, assisting with Secretariat tasks and the fulfilment of EuFMD objectives. The consultant will perform the following tasks:

 Support with technical assistance to countries neighbouring to EuFMD Member States (Libya, Sudan, Lebanon, Mauritania) and other countries on request, to achieve progress within their current Stage of the PCP and to improve their capacity to control FMD and similar Transboundary Animal Diseases (TADs);

 Provide assistance to countries in European neighbourhood (Libya and Sudan) for designing and implementing risk based surveillance for FAST diseases in identified risk locations;

• Assist the design and delivery of training on epidemiology, data collection, management and analysis, disease detection and reporting in Arabic.

• Assist the implementation of training programme for veterinarians and para-professionals in Libya to support FAST control and Early Warning. Identification of veterinary para-professional (VPPs) training needs (e.g. analysis of VPPs presence and distribution, role and regulatory framework, training requirements, motivation, networks, competency, etc) and training methodology;

• Assist the implementation of a risk information and mapping system in Libya integrating live animals and price values with movement patterns, and assist the national veterinary services in identifying areas/regions at higher risks and the temporal/seasonal variability of these risks;

 Provide support upon request to epidemiology analysis and risk assessment for FAST diseases in North Africa and Middle East;

 Assist the collection of regular risk information for FAST diseases in Libya and support the implementation of risk information sharing system between Libya, Egypt, Sudan and Jordan.

• Provide regular support to the epidemiology network established within the REMESA countries through the participation to online and face-to-face meetings for North Africa and Middle East countries; Faculty of Veterinary Medicine, University of Tripoli, Tripoli- Libya June 2019 – Now

Food and Agriculture Organization of the United Nations (FAO) Dec. 2018 – June 2019

Faculty of Veterinary Medicine, University of Tripoli, Tripoli- Libya October 2017 – June 2018

Faculty of Veterinary Medicine, University of Tripoli, Tripoli- Libya June 2015 – May 2019

Faculty of Veterinary Medicine, University of Tripoli, Tripoli- Libya June 2011 – May 2015

Food and Agriculture Organization of the United Nations (FAO) Feb. 2015 – June 2015

#### **Professor at Preventive Medicine Department**

Teaching some post-graduate courses (Biostatistics, Clinical, Applied, and Descriptive Epidemiology). Supervision, advising and helping post-graduate students in conducting their projects and analyzing their data.

### National Veterinary Consultant (OSRO/LIB/801/CHA)

Under the general supervision of the Coordinator of FAO subregional office for North Africa (SNE), the direct supervision of the Officer in charge of FAO Representation in Libya, the technical supervision of the Animal Production and Health Officer (LTO) and in close collaboration with the National Centre for Animal health, the consultant will perform the following tasks:

- 1. Coordinate the implementation of the project activities in Libya;
- 2. Supervise vaccination campaigns for rabies and HPAI and field surveillance of Avian Influenza, Rabies and Rift Valley Fever in Libya;
- 3. Conduct the epidemiological outbreak investigations;
- 4. Plan and prepare training workshops;
- 5. Receive materials and equipment provided by the Organization within the project plan and establish a mechanism for its distribution;
- 6. Evaluate progress, compile the monthly reports and any other relevant information;

### **Director of Preventive Medicine Department**

#### **Associated Professor at Preventive Medicine Department**

Teaching some post-graduate courses (Biostatistics, Clinical, Applied, and Descriptive Epidemiology). Supervision, advising and helping post-graduate students in conducting their projects and analyzing their data.

#### **Assistant Professor at Preventive Medicine Department**

Teaching some post-graduate courses (Biostatistics, Clinical, Applied, and Descriptive Epidemiology)

#### Consultant

Under the overall supervision of the Chief, Animal Health Service (AGAH), and in close coordination with the Senior Officer, Emergency Prevention Systems (EMPRES) and other senior officers in AGAH, including the EuFMD Secretariat on FMD issues, providing advice and assistance to the EMPRES group. In particular,

Provide guidance and technical assistance for the elaboration of sound control strategies for targeted priority animal diseases.

Assist in the design and implementation of epidemiological studies and surveillance programmes for major trans boundary animal diseases.

Actively participate and provide inputs for the formulation and drafting of projects documents (including profiles and concept notes) for processes

initiated at HQs level.

Participate in the monitoring of FAO activities and outputs related to animal health programmes at global, regional and country levels.

## National Center of Animal Health (NCAH) Zawia- Libya June 2012 – Nov. 2014

Director of the Center, CVO, and OIE delegate

1) Development of plans and programs and implementing preventive and curative protection of livestock diseases.

2) Contribute to the preservation of public health through the development and implementation of joint programs of disease control and eradication.

3) Protection of livestock diseases coming through all border procedures on animals and products entering the country.

4) Development and implementation of policies, plans and strategies and propose and elaboration of legislation and the laws and regulations governing the work of animal health in Libya.

5) Study the feasibility of producing vaccines and veterinary medicines.

6) Organize and track import veterinary vaccines and veterinary supplies and products and feed additives and materials production and participation in the preparation of legislation.

7) Veterinary health certificate for live animals and products intended for export outside Libya.

8) Veterinary health leave to slaughterhouses slaughtering poultry, pharmacy and veterinary laboratories and production plants of medicines and veterinary products and feed additives and technical supervision by.

9) Conduct research and studies relating to animal health and public health, as well as coordination with other research providers.

10) Libya's representation and participation in global and regional organizations relevant to the functions of the Board.

11) Participate in preparation of projects of bilateral and international conventions related to the area of competence of the Commission and documented and follow up their implementation.

12) Proposed budget for the financing of activities and programs and projects transition plans in this area.

## Lecture at Preventive Medicine Department

Teaching 4<sup>th</sup> and 5<sup>th</sup> year student (Animal Health, Epidemiology, and Zoonosis) and Teaching some post-graduate courses (Clinical, Applied, and Descriptive Epidemiology)

Advising and helping post-graduate students in conducting their projects and analyzing their data.

#### **Faculty Member**

Teaching  $4^{th}$  and  $5^{th}$  year student (Animal Health, Epidemiology, and Zoonosis).

Working with the final year students in their graduate project papers, which cover some areas of veterinary sciences such as avian disease, epidemiology, animal health, etc.

Faculty of Veterinary Medicine, University of Tripoli, Tripoli- Libya June 2008 – May 2011

Faculty of Veterinary Medicine, University of Tripoli, Tripoli- Libya 1998 – 2001

# Member of the following committees in Libya:

The Head of Scientific Advisory Committee for the Control of Corona Pandemic Virus, Ministry of Education (2021)

The Member of the Scientific Committee for the Control of Corona Pandemic Virus, at the National Center for Disease Control (2021)

Member of the Scientific Committee of Epidemiology at the National Center for Disease Control (2020)

Member of the Scientific Advisory Committee for the Control of Corona Pandemic Virus, Ministry of Education (2020)

Scientific Research Ethics Committee at the University of Tripoli (2020)

Head of Committee of Epidemiology at University of Tripoli (May - October 2020)

Scientific Adviser and Consultant at National Center of Animal Health (NCAH) since November 2017

Head of Research, Consulting and Training Department, Faculty of Veterinary Medicine, University of Tripoli (2015-2019)

Head of Cultural Affairs Department, Faculty of Veterinary Medicine, University of Tripoli (2015-2019)

Mediterranean Animal Health Network (REMESA 2013) Co-chair

Permanent committee of Zoonosis diseases in Libya (July 2012-2019)

# **Graduate Students**

### Supervisor of Master Degree

Ibtesam S. Al Toumei (2012). Sero prevalence of human Brucellosis in western region of Libya.
A master thesis, School of Basic Science, Libyan Academy of Graduate Studies. Autumn 2012.
Manal A. Aljeadi (2014). EFFECINCY OF STRELIZATION METHODS IN DENTAL CLINICS IN TRIPOLI
– LIBYA. A master thesis, School of Basic Science, Libyan Academy of Graduate Studies. Fall 2014.
Hiyam M. Zegallai (2015). SEROEPIDEMIOLOGICAL STUDY OF FOOT AND MOUTH DISEASE IN SHEEP,
GOATS AND CATTLE IN TRIPOLI REGION, LIBYA. A master thesis, Master of Veterinary Sciences (M.V. Sc)
in Preventive Medicine, University of Tripoli. Spring 2015

**MOHAMED D. ALMESHAY (2015).** EPIDEMOLOGICAL STUDY ON PESTE DES PETITIS RUMINANTS IN TRIPOLI REGION. A master thesis, Master of Veterinary Sciences (M.V. Sc) in Preventive Medicine, University of Tripoli. Spring 2015

**Symaia M. Abdul Jawad (2016).** Serological Survey for Foot and Mouth Disease (FMD) in Livestock Animals in Zliten Region – Libya. A master thesis, Master of Veterinary Sciences (M.V. Sc) in Preventive Medicine, University of Tripoli. Winter 2016

# **Skills**

Arabic	Mother Languish
English	Excellent / Working knowledge
French	Very Good

#### **Computer skill**

Email / internet	Working knowledge
MS Access or databases	Working knowledge
MS Excel	Working knowledge

MS PowerPoint MS Word SPSS SAS ArcGIS and QGIS Working knowledge Working knowledge Working knowledge Working knowledge Working knowledge

### **FIELDS OF EXPERTISE**

**Development and Training Bacterial and Zoonotic Diseases Management** Infectious Diseases- Emergency/Quarantine **Integrated Animal Health Management** Veterinary Public Health Management Data Analysis Statistical database and metadata management Survey Methodology and Questionnaire Design **Conferences Organization and Management** Meeting Reports and Records Management **Project Programme Formulation Project Programme Implementation Project Programme Management Project Programme Monitoring and Evaluation** Organizational Design Animal Epidemiology/Emergency Prevention System Farmer Groups and Capacity Building Livelihoods Operations Livestock Development Veterinary Legislation Livestock Production Systems - Large Ruminants Livestock Products Safety and Quality Food Safety Impact Assessment Communication on Food Safety and Quality Food Control Management and Policy Food Inspection and Certification Food Microbiology Food Safety Assessment Food Safety Emergency Food Safety Legislation Food Safety Management Systems Food Safety and Quality Capacity Building International Standards for Food Safety and Quality

More than 15 years of experience More than 12 years of experience More than 15 years of experience More than 15 years of experience More than 12 years of experience From 6 to 7 years of experience More than 10 years of experience From 6 to 7 years of experience More than 15 years of experience From 6 to 7 years of experience From 6 to 7 years of experience From 6 to 7 years of experience From 6 to 8 years of experience More than 12 years of experience More than 8 years of experience

# Working with the International Organization

- Writing and developing a national strategy for control and eradication of PPR in Libya. Submitted on August 2018, supported by AU IBAR.
- Develop a strategy to combat foot-and-mouth disease (EU-FMD, FAO, OIE)
- Train the trainer in the area of information resources of livestock "ARIS II" (AU-IBAR)
- Train number 2 members from the veterinary department in communicate (REMESA)
- Signed an agreement with the Institute of Brescia, Italy (IZSLER) for assistance in clearing a number of diseases, training and with the support of the Italian Government to diagnosis foot-and-mouth disease and some other diseases.

- Signing of a cooperation agreement between the Member States of the Mediterranean network of animal health REMESA for creating and developing a Mediterranean network for animal health and with the technical support of the world Organization for animal health OIE, the world Organization for food and Agriculture
- Risk reduction program for foot-and-mouth disease in the EU and neighbor countries through a number of sessions, which began in January and continue until March 2015, with the support of the European Union.
- Participation in the program to strengthen governance of veterinary in Africa to improve livestock's contribution to food security and safety, and economic growth and wealth creation in Africa (AU-IBAR)
- Development strategy of the National Center of Animal Health
  - Subsequently;
  - $\circ~$  a general strategy for NCAH for 2014-2019 in cooperation with experts from the World Organization for animal health OIE
  - Finalizing the strategy of five years of the laboratories .
- Rehabilitation of **veterinary laboratories** in Libya as follows:
  - Enter the laboratory of Tripoli on the global assessment program to the field of diagnosis of foot-and-mouth disease for approval later and as a result of the above-mentioned training courses according to the agreement signed with the Italian

# Activities

- Writing and developing a national strategy for control and eradication of PPR in Libya. Submitted on August 2018, supported by AU IBAR.
- Creating a Rapid Response team for emergency animal health
- Preparation and implementation of local training courses and lectures and programs in different areas Libya
- Introductory course for all veterinary emergency team
- Educational lectures on sampling and diagnosis of foot-and-mouth disease and disease-tuberculosis
- Organized courses on diseases of camels by one expert from Sudan for about 60 veterinarian and with the participation of some trainees of the animal production and management courses
- Design courses in the collection of samples and blood tests for 15 trainees
- The design of a program for the rehabilitation of more than 250 para veterinarian at the level of Libya
- Coordination with the Centre for disease control of the Ministry of health and the food and drugs control and the National Center for standards and measurements in relation to zoonoses and animal and exchange experiences in the area of laboratories, training and utilization of existing standards and specifications and organizing periodic meetings and propose joint programs
- Field visits to several towns and villages to the ground and communicate and determine the real needs and priorities of each region

# Some of the workshop, meeting and conference attended

**Participate in the international workshop on design of Experiments and medical studies.** June 18 – 25, 1997/ Guelph University – Guelph, Canada

**Participation in the second international workshop on analysis and risk assessment.** May 19 – 23, 2003 / Paris - France

**Participate in the international workshop on geographical information systems.** June 20 – 22, 2004/ Guelph - Canada

**Participate in the international workshop on predictive of bacterial growth (**Predictive Microbiology**).** February 20 – 22, 2010/ Dubai – UAE Arabic **Participation in International Conference on geographic information systems (GIS).** June 23-25, 2004/Guelph - Canada

Participation in the twenty-third International Congress of Salmonella. 2005 Saint Malo - France Participation in the XXV Jubille World Buiatrics Congress, July 6 - 11, 2008/ Budapest, Hungary Participate in the Dubai International Food Safety Conference August 22 – 24, 2010/ Dubai – UAE Arabic Participate in many scientific conferences of the Libyan and the Maghreb

The first and second doctors Libyans abroad in 2005 and 2007

International Conference on chemical developments. November 2006 Sebha-Libya

International Veterinary Medical Scientific Conference July 2010, Baydi –Libya

Stakeholder's workshop (AU-IBAR) on livestock and related policies, animal health strategies and veterinary legislation in the UMA/CENSAD 18-21 June Cairo- Egypt

FAO/OIE Global Conference on Foot and Mouth Disease Control 27-29 June 2012 Bangkok- Thailand

Training Workshop (AU-IBAR) on the Use of Science-based Methods and Development of Scientific Arguments in Standard-setting 10-12 July 2012 Tunisia- Tunis

Atelier Sous-Regional (FAO) sur "La strategie de lutte contre la fievre aphteuse dans les pays du Maghreb" 23-25 Juillet 2012 Rabat- Morocco

**Regional Workshop on "Animal identification and traceability: tools for the management and utilization of genetic resources, the fight against animal diseases and food security" (FAO)** 22-23 November 2012 Rabat- Morocco

Keynote Speaker and Member of Scientific Commit in Risk Analysis as a Tool for the Control of Animal Disease and Zoonoses in the Mediterranean Basin 5-7 November 2013, Teramo, Italy

**OIE Global Conference on Veterinary Education and the Role of the Veterinary Statutory Body** 4-6 December 2013, Foz do Iguacu – Brazil.

**Organizing and participating in two workshops during January and March 2014**, organised by European Commission for the Control of Foot-and-Mouth Disease (EuFMD) in Tripoli to implement the Risk Based Strategic Plan to control FMD in Libya. 1<sup>st</sup> workshop in Tripoli, 26 - 30 January 2014 and the 2<sup>nd</sup> workshop in Tripoli, 23 - 27 March 2014.

**Organizing and participating in FMD Scientific Day in Tripoli** in 30/3/2014, with participating of international FMD experts.

**Organizing and participating in 4<sup>th</sup> workshop during 19-23 April 2015**, organised by European Commission for the Control of Foot-and-Mouth Disease (EuFMD) in Cairo, Egypt, to implement the Risk Based Strategic Plan to control FMD in Egypt.

**Organizing Several Training Workshops on SPSS and Data Management (32 Hours)** at Research, Consulting and Training Center, University of Tripoli in Tripoli, Libya.

**Organizing Several Hazard Analysis and Critical Control Points Training Workshop during 2016 to 2017**, organised by Research, Consulting and Training Center, University of Tripoli in Tripoli, Libya.

Organizing and participating in Libyan Animal Health Expertise Meeting on Control of Animal Transboundary Diseases on 26 February 2018 organised by Faculty of Veterinary Medicine, University of Tripoli, Tripoli- Libya.

**Organizing and participating in Progressive FMD control in Lebanon and Syria: workshop on developing a risk-based strategy plan (RBSP) for FMD control during 24-26 July 2018,** organised by European Commission for the Control of Foot-and-Mouth Disease (EuFMD) in *Beirut, Lebanon.* 

Organizing and participating in Workshop to Validate the National PPR Control and Eradication Strategy and Action Plan for Libya, 28-30 August 2018, organised by AU IBAR in Tunis, Tunisia.

The Collaborative Workshop between Egypt and New Zealand to Design an Applied Epidemiology Training Programme for Egypt and the Region from 2nd to 4th September 2019, Cairo, Egypt.

### References

**A. Dayhum, A. Fares, M. Griffiths and S. McEwen. (1998)**. Preliminary Studies of the Effect of Various Pre-Slaughter Factors on Fecal Shedding and Beef Carcass Contamination with Escherichia coli. University of Guelph. Available at <u>http://bru.aps.uoguelph.ca/meat\_quality.htm</u>

**A. Faris, A. Dayhum, M. Griffiths and S. McEwen. (1998).** The distribution of antibiotic-resistant marker strains of *Escherihia coli* in feces and on carcasses of feedlot cattle. University of Guelph. Available at <u>http://bru.aps.uoguelph.ca/Articles97/A-distribution of antibiotic.htm</u>

**A. Dayhum, A. Fares, M. Sanna, O. Cerf, Y. Millemann. (2008)**. Quantification of Salmonella in French Cattle Fecal Samples at Slaughter House by MPN Real Time PCR. XXV Jubille World Buiatrics Congress, Budapest, Hungary, 1217.

**A.Fares, A. Dayhum, M. Sanna, O. Cerf, Y. Millemann. (2008).** Quantitative Risk Assessment Model of Human Salmonellosis Link to the Consumption of Camembert Cheese made from Raw Milk. XXV Jubille World Buiatrics Congress, Budapest, Hungary, 319.

**D. Abdunaser, F. Almabrouk, W. Ashraf, M. Yves, C. Olivier and S. Moez. (2009).** Quantitative Risk Assessment Model of Human Salmonellosis Link to the Consumption of Ground Beef. Iraqi Journal of Veterinary Sciences, Vol. 23, Supplement II, (263-273)

**D. Abdunaser, F. Almabrouk, W. Ashraf, M. Yves, C. Olivier and S. Moez. (2009).** Combination of Most-Probable-Number Method with Light-cycler Real-Time PCR Assay (MPN-Real-Time PCR) for Rapid Quantification of Salmonella in Artificially and Naturally Contaminated Bovine Fecal Samples at Slaughter House. Iraqi Journal of Veterinary Sciences, Vol. 23, Supplement II, (231-243)

Almabrouk R. Fares, Imad E. Buishi, Abdunaser Dayhum, (2012). Growth of Salmonella in Artificially Contaminated Milk Samples Stored at Different Times and Temperatures. LVMJ Vol. 3. December (15-36)

M. A. Sharif, M. E. Farhat, E. S. Karaim, N. A. Altrabulsi, A. M. Kammon, A. S. Dayhum and I. M. Eldaghayes. (2013). Ovine paratuberculosis: a confirmed case of John's disease in Libya. Open Veterinary Journal, Vol. 3(2): 131-134

Abdulwahab Kammon, Tan Sheau Wei, Abdul Rahman Omar, Abdunaser Dayhum, Ibrahim Eldhayes and Monier Sharif. (2013). Molecular Detection and Characterization of Infectious Bronchitis Virus from Libya. International Journal of Medical, Pharmaceutical Sciences and Engineering vol. 7 No. 12: 689-691

**A. S. Dayhum (2014).** Learning needs concerning risk analysis in the Mediterranean Countries. Risk Analysis as a Tool for the Control of Animal Disease and Zoonoses in the Mediterranean Basin. 5-7 November 2013, Teramo, Italy

Sharif MAM, Eldaghayes IM, Kammon AM and Dayhum AS. (2014). Melanoacanthoma in a Dog: A Case Report. J Veterinary Sci Technolo Vol. 5 Issue 2. 1000167

N. J. Knowles, K. Bachanek-Bankowska, J. Wadsworth, V. Mioulet, B. Valdazo-Gonz alez, I. M. Eldaghayes, A. S. Dayhum, A. M. Kammon, M. A. Sharif, S. Waight, A. M. Shamia, S. Tenzin, U. Wernery, S. Grazioli, E. Brocchi, S. Subramaniam, B. Pattnaik and D. P. King. (2014). Outbreaks of Foot-and-Mouth Disease in Libya and Saudi Arabia During 2013 Due to an Exotic O/ME-SA/Ind-2001Lineage Virus. Transboundary and Emerging Diseases. Blackwell Verlag GmbH Received for publication July 11, 2014

**Hiyam M. Zegallai, Emad M. Bennour, Ibrahim M. Eldaghayes and Abdunaser S. Dayhum (2014).** SERO-EPIDEMIOLOGICAL STUDY OF FOOT AND MOUTH DISEASE IN LIVESTOCK IN Tripoli, LIBYA. Open Session of the EuFMD. 29-31 October, 2014, Cavtat -Croatia.

Ibrahim Eldaghayes, Abdunaser Dayhum, Abdulwahab Kammon, Monier Sharif, Giancarlo Ferrari, Christianus

Bartels, Keith Sumption, Donald P. King, Santina Grazioli and Emiliana Brocchi (2015). FMD in Libya and the control strategy. Open Session of the EuFMD. 29-31 October, 2014, Cavtat -Croatia.

**M.A.M. Sharif, M.M.A. Alagab, I.M. Eldaghayes, A.M. Kammon and A.S. Dayhum (2015).** Caprine Coccidiosis: An outbreak in the Green Mountain in Libya. Journal of Veterinary Medicine and Animal Health. Vol. 7(6), pp. 229-233

"First Scientific Forum on FMD in Egypt". This meeting was held in Cairo, Egypt from 12-13 April, 2014.

Abdulwahab Kammon, AlirezaHeidari, Abdunaser Dayhum, Ibrahim Eldaghayes, Monier Sharif, Isabella Monne, Giovanni Cattoli, Abdulatif Asheg, Milad Farhat, and Elforjani Kraim. (2015). Characterization of Avian Influenza and Newcastle Disease Viruses from Poultry in Libya. Avian Diseases, 59(3): 422-430.

Eldaghayes I., Dayhum A., Kammon A., Sharif M., Ferrari G., Sumption K., King D. P., Grazioli S. and Brocchi, E. (2015). Control strategy of FMD in Libya and post- vaccination monitoring. Global Foot-and-Mouth Disease Research Alliance (GFRA) scientific meeting, Hanoi, Vietnam, 20-22 October 2015.

Dayhum A., Eldaghayes I., Kammon A., Sharif M., Ferrari G., Conchedda G., Cinardi, G., Sumption, K., King D. P., Grazioli S. and Brocchi E. (2015). FMD Serological Survey In Libya And The Circulating Viruses. Global Foot-and-Mouth Disease Research Alliance (GFRA) scientific meeting, Hanoi, Vietnam, 20-22 October 2015.

Symaia M. AbdulJawad, Hiyam M. Zegallai, Emad M. Bennour, Ibrahim M. Eldaghayes, Fabrizio Rosso, Chris J. M. Bartels and Abdunaser S. Dayhum. (2016). SERO-EPIDEMIOLOGICAL STUDY OF FOOT AND MOUTH DISEASE IN LIVESTOCK IN WEST LIBYA. Open Session of the EuFMD. 26-28 October, 2016, Cascais, Portugal.

**Ibrahim Eldaghayes, Abdunaser Dayhum, Abdulwahab Kammon, Monier Sharif, Giancarlo Ferrari, Christianus Bartels, Keith Sumption, Donald P. King, Santina Grazioli and Emiliana Brocchi (2017).** Exploiting serological data to understand the epidemiology of foot-and-mouth disease virus serotypes circulating in Libya. Open Veterinary Journal, Vol. 7(1): 1-11.

Abdulwahab Kammon, Paolo Mulatti, Monica Lorenzetto, Nicola Ferre, Monier Sharif, Ibrahim Eldaghayes and Abdunaser Dayhum (2017). Biosecurity and geospatial analysis of mycoplasma infections in poultry farms at Al-Jabal Al-Gharbi region of Libya. Open Veterinary Journal, Vol. 7(2): 81-85.

A. Dayhum, M. Sharif, I. Eldaghayes, A. Kammon, P. Calistri, M. L. Danzetta, D. Di Sabatino, A. Petrini, G. Ferrari, S. Grazioli, G. Pezzoni, E. Brocchi (2017). Sero-prevalence and epidemiology of peste des petits ruminants in Libya. Transboundary and Emerging Diseases Journal. DOI: 10.1111/tbed.12670

Mohamed Dakil Almeshay, Abubaker Gusbi, Ibrahim Eldaghayes, Riadh Mansouri, Mohammed Bengoumi and Abdunaser S. Dayhum (2017). An epidemiological study on Peste des petits ruminants in Tripoli Region, Lybia. Veterinaria italiana, 53(3). DOI10.12834/VetIt.964.5025.3

A. Mahmoud, D. Di Sabatino, M. Danzetta, F. Iapaolo, F. Tolari, M. Forzan, M. Mazzei, A. Dayhum, F. De Massis and F. Monaco (2018). Rift Valley fever virus: a serological survey in Libyan ruminants. Open Veterinary Journal, Vol. 8(2): 204-207.

Katarzyna Bachanek-Bankowska, Antonello Di Nardo, Jemma Wadsworth, Valerie Mioulet, Giulia Pezzoni, Santina Grazioli, Emiliana Brocchi, Sharmila Chapagain Kafle, Ranjani Hettiarachchi, Pradeep

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