# **WOAH Reference Laboratory Reports Activities 2023**

# **Activities in 2023**

This report has been submitted: 13 juin 2024 16:38

# **Laboratory Information**

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Mycoplasma gallisepticum and Mycoplasma synoviae			
Address of laboratory:	Bati Mahallesi Yunus Caddesi 2/1 Pendik Istanbul Turkiye 34890			
Tel.:	+ 90 216 390 12 80			
E-mail address:	umit.sevimli@outlook.com			
Website:	https://vetkontrol.tarimorman.gov.tr/pendik/Sayfalar/EN/AnaSayfa.aspx			
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Mustafa KESMEN, Director			
Name (including Title and Position) of WOAH Reference Expert:	Dr. Umit SEVIMLI, Chief of Mycoplasma Reference Laboratory			
Which of the following defines your laboratory? Check all that apply:	Governmental			

# **TOR1: DIAGNOSTIC METHODS**

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)

Yes

ies			
Diagnostic Test	Indicated in WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Indirect ELISA for M. synovaie		1880	0
Direct diagnostic tests		Nationally	Internationally
Mycoplasma gallisepticum culturing		390	0
Real Time PCR for M. gallisepticum		866	0
PCR for M. gallisepticum		421	0
Mycoplasma synovaie culturing		1880	0
Real Time PCR for M. synovaie		866	0

# **TOR2: REFERENCE MATERIAL**

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOAH?

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOAH Members?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAH MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Plate test antigen for M.gallisepticum and M.synoviae	Plate agglutination test	PRODUCED	930 ml M.gallisepticum antigen	40 ml (20 ml Mg, 20 ml Ms)	1	NIGERIA,
CCPP PCR control DNA	Moleculer	PROVIDE	-	2 ml	2	INDIA, SWITZERLAND,

4. Did your laboratory produce vaccines?

Nο

5. Did your laboratory supply vaccines to WOAH Members?

No

# **TOR3: NEW PROCEDURES**

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

No

7. Did your laboratory validate diagnostic methods according to WOAH Standards for the designated pathogen or disease?

Νo

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

Nο

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?

No

# TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAH Members?

No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?

Yes

NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
AZERBAIJAN	Consultation	Online Meeting
NIGERIA	Consultation	By e-mail
SWITZERLAND	Training	Hands-on training courses
TAJIKISTAN	Training	Hands-on training courses

# TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAH Members other than the own?

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
Biosurveillance and risk assessment for small ruminant morbillivirus and Mycoplasma capricolum in goat populations in the Baku and Agdjebedi regions of Azerbaijan	1-5 years	The proposed project on CCPP and PPR will involve experts from the Pendlk Veterinary Control Institute in Turkey and the State Laboratory of Agriculture (SLA) in Georgia to utilize their experience with these diseases in the capacity building process and to further trans-border communication and collaboration in the region. It is expected that the expertise and information generated here will be the base for establishing sustainable national surveillance	Ministry of Agriculture, Central Reference Laboratory (MoA CRL) Azerbaijan Veterinary Science Research Institute (AVSRI): Azerbaijan State Agrarian (ASA) and the veterinary sections of Regional Agrarian Centers University of Connecticut, Department of Pathobiology and Veterinary Science State Laboratory of Agriculture (SLA), Georgia Labyrinth Global Health	AZERBAIJAN GEORGIA UNITED STATES OF AMERICA

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		programs for CCPP and PPR in AZ.		
Discountools CBPP and CCPP	One month	Disease & Product analysis document Gap Analysis and Prioritisation Scoring sheets	CIRAD, France	FRANCE

13. In exercising your activities, have you identified any regulatory research needs\* relevant for WOAH?

Vac

#### -Research need: 1-

Please type the Research need: We observed two differences between the WOAH Terrestrial Handbook 2021, Section 3.3.5 - Avian mycoplasmosis (Mycoplasma galliceptum, M synoviae) page 10 and the original publication of Development of Diagnostic Real-Time PCRs The Four Pathogenic Mycoplasmas (Ziv Raviv and Stanley H. Kleven). Different parts are written in bold italics and underlined below.

Relevance for WOAH Other, Standard Setting,

Relevance for the Codes or Manual Manual,

Field Diagnostics,

Animal Category Terrestrial,

Disease:

Avian mycoplasmosis (Mycoplasma gallisepticum, Mycoplasma synoviae)

Kind of disease (Zoonosis, Transboundary diseases) Transboundary diseases,

If any, please specify relevance for Codes or Manual, chapter and title

(e.g. Terrestrial Manual Chapter 2.3.5 - Minimum requirements for aseptic production in vaccine manufacture)

Answer: In the Chapter 3.3.5 – Avian mycoplasmosis (Mycoplasma gallisepticum, M synoviae), page 10, OIE Terrestrial Manual 2021,

#### Notes:

Answer: 1. "Each reaction contains a total of 25  $\mu$ l comprising 5  $\mu$ l of target DNA, 12.5  $\mu$ l of 2× of universal real-time PCR master mix, 5  $\mu$ M of each final primer and 0.2  $\mu$ M final probe)" 2. "MGRrtr 5'-CCA-AGG-GAT-TCA-ACC-ATC-3'" (At the end 2 nucleotide is missing.) In the original publication (Ziv Raviv and Stanley H. Kleven) Development of Diagnostic Real-Time PCRs The Four Pathogenic Mycoplasma (https://doi.org/10.1637/8469-091508-Reg.1) Page 104 under the Real-Time TaqMan PCR primers, probes and reaction conditions 1. "Primers and probes were utilized in a 25  $\mu$ l reaction mix containing 12.5  $\mu$ l of 2x QuantiFast Probe PCR Mix without ROX dye (Qiagen), primers to a final concentration of 0.5  $\mu$ M, and a probe to a final concentration of 0.2  $\mu$ M, 5.0 ml of water, and 5.0  $\mu$ l of DNA template solution " 2. " MGRrtr 5'-CCA-AGG-GAT-TCA-ACC-ATC-TT -3'"

### TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

Yes

#### IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

Information on all animal diseases in Turkey is collected in a system called VELBIS established within the Ministry of Agriculture and Forestry.

The epidemiology unit of the Institute collects epidemiological data from all laboratories on a quarterly basis. The Directorate of the Institute shares the epidemiological data collected from all laboratories with the Ministry of Agriculture and Forestry every 3 months.

Annual reports to Ministry of Agriculture and Forestry.

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

Yes

#### IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

Publications, Technical meetings and Reports.

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the

a) Articles published in peer-reviewed journals:

2

Dayo O I, Adeola A E, Igbekele A A, Özdemir Ü, Sunday A D. (2022) Prevalence of Mycoplama gallisepticum and Mycoplasma synoviae in Free Range Chickens and Wild Birds in Osun, Oyo and Kwara States Nigeria Tropical Veterinarian, 40: (I & II), 1-13. WEBSITE: www.tropivet.com ISSN 0794-4845, Nigeria

Cengiz Ş, Okur S, Oz C, Turgut F, Gumurcinler B, Sevuk N S, Kekeç A I, Cepoglu H, Sevimli Ü and Adiguzel M C. (2023) Prevalance and clonal diversity of methicillin-resistant

Staphylococcus aerous and methicillin-resistant Staphylococus pseudointermeius isolated from dogs and cats with eye discharge. Acta Microbiologica et Immunologica Hungaria. 70 (2), 134-141.

DOI: https://doi.org/10.1556/030.2023.01899

- b) International conferences:
- c) National conferences:
- d) Other (Provide website address or link to appropriate information):

1

Annual report to the Ministry of Agriculture and Forestry of Turkiye https://vetkontrol.tarimorman.gov.tr/pendik/Sayfalar/Detay.aspx?Sayfald=11

# TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?

Yes

a) Technical visit: 1

b) Seminars : 2

c) Hands-on training courses: 2

d) Internships (>1 month) 0

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
Α	AZERBAIJAN	2
С	TAJIKISTAN	1
В	AZERBAIJAN	2
В	GEORGIA	1
С	SWITZERLAND	1

# **TOR8: QUALITY ASSURANCE**

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
EN ISO/IEC 17025	PDF	AKREDİTASYON SERTİFİKASI VE KAPSAMI.pdf

#### 19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Isolation and identification of Mycoplasma meleagridis	TURKAK
Diagnosis of Mycoplasma gallisepticum by Real-Time PCR	TURKAK
Diagnosis of Contagious agalactiae by PCR	TURKAK
Isolation and identification of Mycoplasma gallisepticum	TURKAK

Diagnosis of Contagious caprine pleuropneumoniae by PCR

TURKAK

20. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned?

Yes

Personnel biorsik training, Biological agents and toxin inventory and information system, General laboratory safety programme: chemical safety, clothing and personal protective equipment, waste management, worker health programme, biological safety cabinets etc.

# TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAH?

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAH?

No

## TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?

No

24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?

Nο

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen?

No

26. Did your laboratory collaborate with other WOAH Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

No

## TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAH Reference Laboratories for the same pathogen?

Yes

Purpose for inter- laboratory test comparisons1	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the Test	WOAH Member Countries
Ring trial : M. gallicepticum plate test	Organizer ( Postponed)	5	M. gallicepticum plate test	TURKEY,
Ring trial : M. synovaie	Organizer ( Postponed)	5	M. synovaie plate test	TURKEY,

# **TOR12: EXPERT CONSULTANTS**

28. Did your laboratory place expert consultants at the disposal of WOAH?

No

29. Additional comments regarding your report:

On Feb. 6, 2023, a magnitude 7.8 earthquake occurred in our country. Many of our provinces were affected by the earthquake and a major disaster occurred. For this reason, some national congresses were canceled, organized technical meetings and ring trials were postponed.

-Therefore, a national Mg/Ms ring trial was organized in 2023 but unfortunately, it had to be postponed to 2024. Postponed ring trials will be held in 2024. Meetings rescheduled for 2024