

OIE Reference Laboratory Reports Activities

Activities in 2021

This report has been submitted : 2022-01-03 10:21:06

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Salmonellosis
Address of laboratory:	Animal and Plant Quarantine Agency (APQA) Ministry of Agriculture, Food and Rural Affairs (MAFRA) 177, Hyeoksin 8-ro, Gimcheon-si, Gyeongsangbuk-do, 39660, KOREA (REP. OF)
Tel.:	+82-54-912-0818
Fax:	+82-54-912-0833
E-mail address:	kangmskr@korea.kr
Website:	http://www.qia.go.kr
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Bong-Kyun Park, DVM, PhD, Commissioner, APQA
Name (including Title and Position) of OIE Reference Expert:	Min-Su Kang, DVM, PhD, Senior Veterinary Researcher, Chief of Avian Bacteriology Laboratory, Avian Disease Research Division, APQA
Which of the following defines your laboratory? Check all that apply:	Governmental

ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards

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

Diagnostic Test	Indicated in OIE Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
-	-	-	-
Direct diagnostic tests			
Isolation and identification	Yes	153	24
Serotyping	Yes	153	24
PFGE	No	46	13
MLVA	No	46	3
Antimicrobial susceptibility testing	Yes	153	24

**ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards.
To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.**

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

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient OIE Member Countries	Region of recipients
PCR kit	Differential identification of Salmonella Gallinarum and Pullorum	Provide	3,400 tests (68 ml)	0	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to OIE Member Countries?

No

ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

Yes

Name of OIE Member Country seeking assistance	Date (month)	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
MALAYSIA	May-June	0	25

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
MALAYSIA	Molecular epidemiology of Salmonella isolated from poultry	Online meeting by Zoom

ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
The molecular epidemiology of Newcastle Disease, Infectious Bronchitis, and Salmonellosis in Malaysia	January-December	The extension of understanding on the epidemiology of poultry diseases in Southeast Asia	Universiti Putra Malaysia	MALAYSIA

ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:
- Prevalence of Salmonella in poultry farms and meat in Malaysia

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:
- Induction of motility in Salmonella Gallinarum isolated from chickens in Korea. - Serotypes and antimicrobial resistance patterns of recent Salmonella isolates from poultry production facilities.

**13. What method of dissemination of information is most often used by your laboratory?
(Indicate in the appropriate box the number by category)**

a) Articles published in peer-reviewed journals: 2

- High prevalence of a gene cluster conferring resistance to streptomycin, sulfonamide, and tetracycline in Escherichia coli isolated from indigenous wild birds. J. Gen. Appl. Microbiol. 2021 Jun 3;67(2):81-84.
- Comparative characteristics and zoonotic potential of avian pathogenic Escherichia coli (APEC) isolates from chicken and duck in South Korea. Microorganisms 2021, 9(5), 946.

b) International conferences: 0

c) National conferences: 2

- Induction of motility in Salmonella Gallinarum isolated from chickens in Korea. Changwon, Korea, Aug. 25 - Aug. 27, 2021.
- Serotypes and antimicrobial resistance patterns of recent Salmonella isolates from poultry production facilities. International meeting of the Microbiological Society of Korea (MSK2021). Changwon, Korea, Aug. 25 - Aug. 27, 2021.

d) Other:

(Provide website address or link to appropriate information) 0

ToR 7: To provide scientific and technical training for personnel from OIE Member Countries

To recommend the prescribed and alternative tests or vaccines as OIE Standards

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

Yes

a) Technical visits: 0

b) Seminars: 6

c) Hands-on training courses: 0

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
b	Malaysia	9
b	Vietnam	9
b	Indonesia	8
b	Kazakhstan	5
b	The Philippines	3
b	Sri Lanka	1

ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned

15. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO/IEC 17025	2020 KOLAS ISO 17025 Certificate.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Identification of the agent (isolation and identification, serotyping)	Korea Laboratory Accreditation Scheme (KOLAS)
Serological tests (RSA, ELISA)	KOLAS

17. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?

Yes

(See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4)

ToR 9: To organise and participate in scientific meetings on behalf of the OIE

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

No

ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results

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

Yes

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

Yes

Purpose of the proficiency tests: ¹	Role of your Reference Laboratory (organiser/participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
Sensitivity and specificity of Salmonella identification from poultry-associated samples	Participant	107	Various/Animal and Plant Health Agency (United Kingdom)

¹ validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.

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

No

ToR 11: To organise inter-laboratory proficiency testing with laboratories other

than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: <http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing> see point 1.3

Purpose for inter-laboratory test comparisons ¹	No. participating laboratories	Region(s) of participating OIE Member Countries
National proficiency test for differential identification of Salmonella Gallinarum and Salmonella Pullorum (organiser)	54 provincial government and private authorized animal health laboratories	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East

ToR 12: To place expert consultants at the disposal of the OIE

24. Did your laboratory place expert consultants at the disposal of the OIE?

No

25. Additional comments regarding your report: