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LAMPIRAN

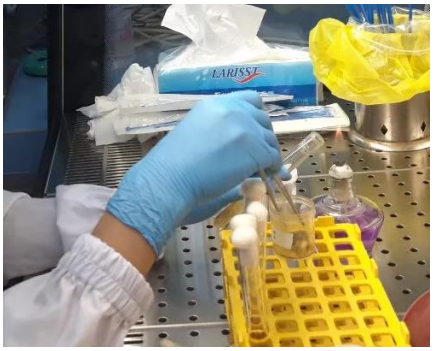
Lampiran 1. Dokumentasi Kegiatan

1. Tempat Pengambilan Sampel

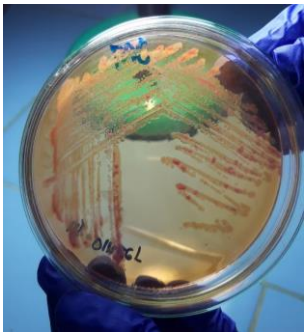
2. Pemisahan organ ikan lele dumbo

Lampiran 2. Tahapan identifikasi bakteri *Aeromonas hydrophila*

a. Penyuburan pada BHIB



b. Isolasi bakteri pada media *Mac Conkey*



b. Identifikasi menggunakan Vitek 2 Compact

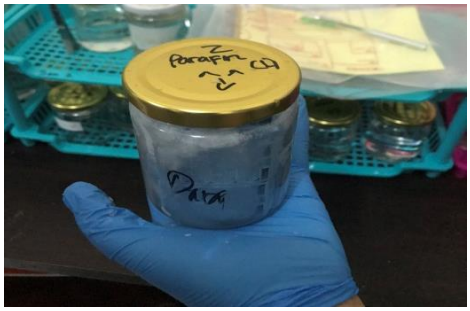
Lampiran 3. Tahapan persiapan dan pembuatan preparat histologi

a. Tahap fiksasi

b. Tahap dehidrasi

c. Tahap clearing

d. Tahap infiltring



e. Tahap embedding

f. Tahap pemotongan

g. Tahap pewarnaan

h. Tahap Pengamatan Preparat Histologi

Tabel Prosedur *Tissue Processor*

No.	Proses	Reagensia	Waktu
1	Fiksasi	Buffer formalin 10%	3 hari
2	*End point*	Alkohol 70%	1 hari
3	Dehidrasi	Alkohol 70%	1 hari
4	Dehidrasi	Alkohol 80%	1 hari
5	Dehidrasi	Alkohol 90%	1 hari
6	Dehidrasi	Alkohol 95%	1 hari
7	Dehidrasi	Alkohol 100%	1 jam
8	Dehidrasi	Alkohol 100%	1 jam
9	*Clearing*	Xylol I	15 menit
10	*Clearing*	Xylol II	15 menit
11	*Infiltring*	Paraffin Cair I	1 jam
12	*Infiltring*	Paraffin Cair II	1 jam
Total waktu			196,5 jam

Tabel Prosedur Pewarnaan HE

No.	Reagensia	Waktu
1	Xylol I	15 menit
2	Xylol II	15 menit
3	Alkohol 100%	1 menit
4	Alkohol 100%	1 menit
5	Alkohol 95%	1 menit
6	Alkohol 90%	1 menit
7	Alkohol 80%	1 menit
8	Alkohol 70%	1 menit
9	Mayer's Haematoxylin	10 menit
10	Rendam dalam Tap Water I	1 menit
11	Rendam dalam Tap Water II	1 menit
12	Eosin	20 menit
13	Alkohol 70%	30 detik
14	Alkohol 80%	30 detik
15	Alkohol 90%	30 detik
16	Alkohol 95%	30 detik
17	Alkohol 100%	30 detik
18	Alkohol 100%	30 detik
19	Xylol I	15 menit
20	Xylol II	15 menit
	Total waktu	101 menit

Lampiran 4. Hasil Uji Biokimia Menggunakan mesin Vitek 2 Compact pada isolat sampel ikan lele

KEMENTERIAN KESEHATAN RI
DIREKTORAT JENDERAL PELAYANAN KESEHATAN
BALAI BESAR LABORATORIUM KESEHATAN MAKASSAR
Jl. Perintis Kemerdekaan KM.11 Tamalanrea Makassar 90245

HASIL PENELITIAN
No. 20008325-20008329/LHU/BBLK-MKS/VI/2020

Nama : **Andi Ananda Sekar Ayu**
Universitas : Universitas Hasanuddin
Fakultas/Jurusan : Fakultas Kedokteran/Kedokteran Hewan
Tanggal Penelitian : 4 - 11 Mei 2020
Judul Penelitian : Identifikasi Bakteri *Aeromonas hydrophila* serta Pengaruhnya terhadap Histopatologi Organ Ginjal, Insang, dan Hati pada Ikan Lele
Sampel : Isolat bakteri
Jumlah sampel : 5 (lima) sampel
Parameter : Kultur Mikroorganisme /Identifikasi Bakteri Aerob
Hasil Penelitian :

No	Kode sampel	Hasil Pewarnaan Gram	Hasil Identifikasi Mikroorganisme	Ket
1	Isolat I	Basil gram negatif	*Aeromonas caviae*	
2	Isolat II	Basil gram negatif	*Sphingomonas paucimobilis*	
3	Isolat III	Basil gram negatif	*Aeromonas hydrophila*	
4	Isolat IV	Basil gram negatif	*Aeromonas veronii*	
5	Isolat V	Basil gram negatif	*Aeromonas hydrophila*	

Makassar, 12 Juni 2020
Dokter Penanggung jawab

dr. Hj. Andi Nurhayati
NIP. 196204151990102001

Telp. 0411 586458, 586457, 586270 Fax. 0411 586270
Surat Elektronik : bblk_makassar@yahoo.com, bblk.mksr@gmail.com

BBLK MAKASSAR

bioMérieux Customer:
System #: 11530

Laboratory Report

Printed May 9, 2020 13:14 SGT
Autoprint

Patient Name: Andi, Regita
Isolate: I-1 (Approved)

Patient ID: 080520

Card Type: GN Bar Code: 2411103203509592 Testing Instrument: 000015F277A8 (11530)
Setup Technologist: Laboratory Supervisor(LabSuper)

Bionumber: 1435713150500211
Organism Quantity:

Selected Organism: Aeromonas hydrophila/caviae

Comments:	

McFarland: (0.50 - 0.63)

Identification Information	**Card:** GN		**Lot Number:** 2411103203	**Expires:**	Dec 3, 2020 12:00 SGT
	Completed: May 9, 2020 13:14 SGT		**Status:** Final	**Analysis Time:**	3.58 hours
Organism Origin	VITEK 2				
Selected Organism	98% Probability	**Aeromonas hydrophila/caviae**			
	Bionumber: 1435713150500211			**Confidence:**	Excellent identification
SRF Organism					

Analysis Organisms and Tests to Separate:

Aeromonas hydrophila/caviae	
Aeromonas caviae	VP(1),
Aeromonas hydrophila	VP(99),

Analysis Messages:

Contraindicating Typical Biopattern(s)

Aeromonas hydrophila/caviae	H2S(14),

Installed VITEK 2 Systems Version: 08.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:

BBLK MAKASSAR

bioMérieux Customer:
System #: 11530

Laboratory Report

Printed May 9, 2020 13:14 SGT
Autoprint

Patient Name: Andi, Regita
Isolate: I-1 (Approved)

Patient ID: 080520

Card Type: GN Bar Code: 2411103203509592 Testing Instrument: 000015F277A8 (11530)
Setup Technologist: Laboratory Supervisor(LabSuper)

Bionumber: 1435713150500211
Organism Quantity:

Selected Organism: Aeromonas hydrophila/caviae

Biochemical Details																	
2	APPA	+	3	ADO	-	4	PyrA	-	5	lARL	-	7	dCEL	-	9	BGAL	+
10	H2S	+	11	BNAG	+	12	AGLTp	-	13	dGLU	+	14	GGT	-	15	OFF	+
17	BGLU	+	18	dMAL	+	19	dMAN	+	20	dMNE	+	21	BXYL	-	22	BAlap	-
23	ProA	+	26	LIP	+	27	PLE	-	29	TyrA	+	31	URE	-	32	dSOR	-
33	SAC	+	34	dTAG	-	35	dTRE	+	36	CIT	-	37	MNT	-	39	5KG	-
40	ILATk	+	41	AGLU	-	42	SUCT	+	43	NAGA	-	44	AGAL	-	45	PHOS	-
46	GlyA	-	47	ODC	-	48	LDC	-	53	lHISa	-	56	CMT	+	57	BGUR	-
58	O129R	+	59	GGAA	-	61	lMLTa	-	62	ELLM	+	64	ILATa	-			

Installed VITEK 2 Systems Version: 08.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:

BBLK MAKASSAR

bioMérieux Customer:
System #: 11530

Laboratory Report

Printed May 9, 2020 16:09 SGT
Autoprint

Patient Name: Andi, Regita
Isolate: II-1 (Approved)

Patient ID: 080520

Card Type: GN Bar Code: 2411103203509591 Testing Instrument: 000015F277A8 (11530)
Setup Technologist: Laboratory Supervisor(LabSuper)

Bionumber: 5001100300140011
Organism Quantity:

Selected Organism: Sphingomonas paucimobilis

Comments:	

McFarland: (0.50 - 0.63)

Identification Information	**Card:** GN	**Lot Number:** 2411103203	**Expires:**	Dec 3, 2020 12:00 SGT	
	Completed: May 9, 2020 16:09 SGT	**Status:** Final	**Analysis Time:**	6.52 hours	
Organism Origin	VITEK 2				
Selected Organism	89% Probability	**Sphingomonas paucimobilis**			
	Bionumber: 5001100300140011		**Confidence:**	Good identification	
SRF Organism					
Analysis Organisms and Tests to Separate:					
Analysis Messages:					
Contraindicating Typical Biopattern(s)					
Sphingomonas paucimobilis	PyrA(24),URE(1),O129R(1),				

Biochemical Details																	
2	APPA	+	3	ADO	-	4	PyrA	+	5	IARL	-	7	dCEL	-	9	BGAL	-
10	H2S	-	11	BNAG	-	12	AGLTp	-	13	dGLU	+	14	GGT	-	15	OFF	-
17	BGLU	+	18	dMAL	-	19	dMAN	-	20	dMNE	-	21	BXYL	-	22	BAlap	-
23	ProA	-	26	LIP	-	27	PLE	-	29	TyrA	+	31	URE	+	32	dSOR	-
33	SAC	-	34	dTAG	-	35	dTRE	-	36	CIT	-	37	MNT	-	39	5KG	-
40	ILATk	+	41	AGLU	(-)	42	SUCT	-	43	NAGA	-	44	AGAL	-	45	PHOS	+
46	GlyA	-	47	ODC	-	48	LDC	-	53	IHISa	-	56	CMT	-	57	BGUR	-
58	O129R	+	59	GGAA	(-)	61	IMLTa	-	62	ELLM	+	64	ILATa	-			

Installed VITEK 2 Systems Version: 08.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:

BBLK MAKASSAR

bioMérieux Customer:
System #: 11530

Laboratory Report

Printed May 9, 2020 13:15 SGT
Autoprint

Patient Name: Andi, Regita
Isolate: III-1 (Approved)

Patient ID: 080520

Card Type: GN Bar Code: 2411103203509589 Testing Instrument: 000015F277A8 (11530)
Setup Technologist: Laboratory Supervisor(LabSuper)

Bionumber: 1435713150500211
Organism Quantity:

Selected Organism: Aeromonas hydrophila/caviae

Comments:	

McFarland: (0.50 - 0.63)

Identification Information	**Card:** GN		**Lot Number:** 2411103203	**Expires:**	Dec 3, 2020 12:00 SGT
	Completed: May 9, 2020 13:15 SGT		**Status:** Final	**Analysis Time:**	3.60 hours
Organism Origin	VITEK 2				
Selected Organism	98% Probability	**Aeromonas hydrophila/caviae**			
	Bionumber: 1435713150500211			**Confidence:**	Excellent identification
SRF Organism					

Analysis Organisms and Tests to Separate:

Aeromonas hydrophila/caviae	
Aeromonas caviae	VP(1),
Aeromonas hydrophila	VP(99),

Analysis Messages:

Contraindicating Typical Biopattern(s)

Aeromonas hydrophila/caviae	H2S(14),

Installed VITEK 2 Systems Version: 08.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:

BBLK MAKASSAR

bioMérieux Customer:
System #: 11530

Laboratory Report

Printed May 9, 2020 13:15 SGT
Autoprint

Patient Name: Andi, Regita
Isolate: III-1 (Approved)

Patient ID: 080520

Card Type: GN Bar Code: 2411103203509589 Testing Instrument: 000015F277A8 (11530)
Setup Technologist: Laboratory Supervisor(LabSuper)

Bionumber: 1435713150500211
Organism Quantity:

Selected Organism: Aeromonas hydrophila/caviae

Biochemical Details

2	APPA	+	3	ADO	-	4	PyrA	-	5	IARL	-	7	dCEL	-	9	BGAL	+
10	H2S	+	11	BNAG	+	12	AGLTp	-	13	dGLU	+	14	GGT	-	15	OFF	+
17	BGLU	+	18	dMAL	+	19	dMAN	+	20	dMNE	+	21	BXYL	-	22	BAlap	-
23	ProA	+	26	LIP	+	27	PLE	-	29	TyrA	+	31	URE	-	32	dSOR	-
33	SAC	+	34	dTAG	-	35	dTRE	+	36	CIT	-	37	MNT	-	39	5KG	-
40	ILATk	+	41	AGLU	-	42	SUCT	+	43	NAGA	-	44	AGAL	-	45	PHOS	-
46	GlyA	-	47	ODC	-	48	LDC	-	53	IHISa	-	56	CMT	+	57	BGUR	-
58	O129R	+	59	GGAA	-	61	IMLTa	-	62	ELLM	+	64	ILATa	-			

Installed VITEK 2 Systems Version: 08.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:

BBLK MAKASSAR

bioMérieux Customer:
System #: 11530

Laboratory Report

Printed May 9, 2020 13:44 SGT
Autoprint

Patient Name: Andi, Regita
Isolate: IV-1 (Approved)

Patient ID: 080520

Card Type: GN Bar Code: 2411103203509588 Testing Instrument: 000015F277A8 (11530)
Setup Technologist: Laboratory Supervisor(LabSuper)

Bionumber: 1635717152526231
Organism Quantity:

Selected Organism: Aeromonas veronii

Comments:	

McFarland: (0.50 - 0.63)

Identification Information	**Card:** GN	**Lot Number:** 2411103203	**Expires:** Dec 3, 2020 12:00 SGT
	Completed: May 9, 2020 13:44 SGT	**Status:** Final	**Analysis Time:** 4.08 hours
Organism Origin	VITEK 2		
Selected Organism	87% Probability **Aeromonas veronii**		
	Bionumber: 1635717152526231		**Confidence:** Acceptable identification
SRF Organism			
Analysis Organisms and Tests to Separate:			
Analysis Messages:			
Contraindicating Typical Biopattern(s)			
Aeromonas veronii	AGAL(3),ILATk(13),MNT(1),LDC(3),		

Biochemical Details

2	APPA	+	3	ADO	-	4	PyrA	-	5	IARL	-	7	dCEL	+	9	BGAL	+
10	H2S	(+)	11	BNAG	+	12	AGLTp	-	13	dGLU	+	14	GGT	-	15	OFF	+
17	BGLU	+	18	dMAL	+	19	dMAN	+	20	dMNE	+	21	BXYL	-	22	BAlap	-
23	ProA	+	26	LIP	+	27	PLE	+	29	TyrA	+	31	URE	-	32	dSOR	-
33	SAC	+	34	dTAG	-	35	dTRE	+	36	CIT	-	37	MNT	+	39	5KG	-
40	ILATk	+	41	AGLU	-	42	SUCT	+	43	NAGA	-	44	AGAL	+	45	PHOS	-
46	GlyA	-	47	ODC	+	48	LDC	+	53	IHISa	-	56	CMT	+	57	BGUR	-
58	O129R	+	59	GGAA	+	61	IMLTa	-	62	ELLM	+	64	ILATa	-			

Installed VITEK 2 Systems Version: 08.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:

BBLK MAKASSAR

bioMérieux Customer:
System #: 11530

Laboratory Report

Printed May 9, 2020 13:01 SGT
Autoprint

Patient Name: Andi, Regita
Isolate: V-1 (Approved)

Patient ID: 080520

Card Type: GN Bar Code: 2411103203509587 Testing Instrument: 000015F277A8 (11530)
Setup Technologist: Laboratory Supervisor(LabSuper)

Bionumber: 1435713150500211
Organism Quantity:

Selected Organism: Aeromonas hydrophila/caviae

Comments:	

McFarland: (0.50 - 0.63)

Identification Information	**Card:** GN		**Lot Number:** 2411103203	**Expires:**	Dec 3, 2020 12:00 SGT
	Completed: May 9, 2020 13:01 SGT		**Status:** Final	**Analysis Time:**	3.37 hours
Organism Origin	VITEK 2				
Selected Organism	98% Probability	**Aeromonas hydrophila/caviae**			
	Bionumber: 1435713150500211			**Confidence:**	Excellent identification
SRF Organism					

Analysis Organisms and Tests to Separate:

Aeromonas hydrophila/caviae	
Aeromonas caviae	VP(1),
Aeromonas hydrophila	VP(99),

Analysis Messages:

Contraindicating Typical Biopattern(s)

Aeromonas hydrophila/caviae	H2S(14),

Installed VITEK 2 Systems Version: 08.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified: