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Diidentifikasi dengan Bakteri Aeromonas hydrophila. [Skripsi]. Institut Pertanian Bogor: Bogor.

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LAMPIRAN

Lampiran 1. Tempat Pengambilan Sampel

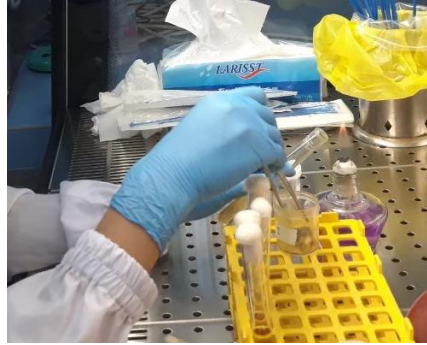


Lampiran 2. Pemisahan Organ

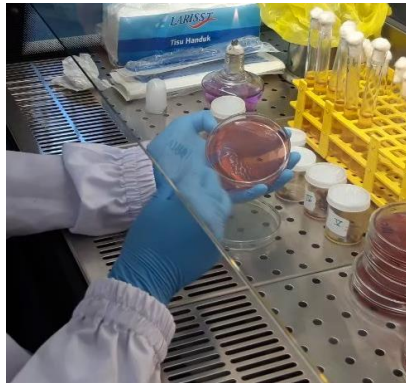


Lampiran 3. Identifikasi *Aeromonas hydrophila*

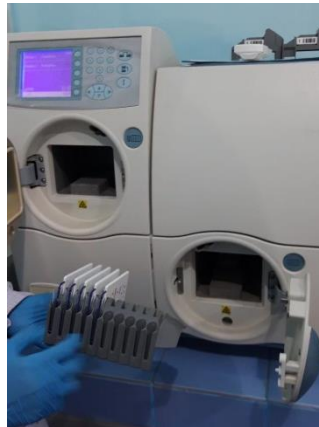
a. Penyuburan pada BHIB



b. Kultur pada *Mac Conkey Agar*



c. Identifikasi pada Vitek 2 *Compact*



Lampiran 4. Tahapan Persiapan dan Pembuatan Preparat Histologi

a. Tahap fiksasi



b. Tahap dehidrasi



c. Tahap clearing



d. Tahap infiltrating



e. Tahap embedding



f. Tahap pemotongan



g. Tahap pewarnaan



h. Tahap Pengamatan Preparat Histologi

**Lampiran 5. Tahapan Prosedur *Tissue Processor* dan Pewarnaan HE**a. Tabel Prosedur *Tissue Processor*

No.	Proses	Reagensia	Waktu
1	Fiksasi	Buffer formalin 10%	3 hari
2	<i>End point</i>	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	<i>Clearing</i>	Xylol I	15 menit
10	<i>Clearing</i>	Xylol II	15 menit
11	<i>Infiltrating</i>	Paraffin Cair I	1 jam
12	<i>Infiltrating</i>	Paraffin Cair II	1 jam
Total waktu			196,5 jam

b. 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 6. Hasil Uji Biokimia Menggunakan Mesin Vitek 2 Compact Pada Isolat Sampel Ikan Lele Dumbo (*Clarias gariepinus*)



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	<i>Aeromonas caviae</i>	
2	Isolat II	Basil gram negatif	<i>Sphingomonas paucimobilis</i>	
3	Isolat III	Basil gram negatif	<i>Aeromonas hydrophila</i>	
4	Isolat IV	Basil gram negatif	<i>Aeromonas veronii</i>	
5	Isolat V	Basil gram negatif	<i>Aeromonas hydrophila</i>	

Makassar, 12 Juni 2020
Dokter Penanggung jawab


dr. Hj. Andi Nurhayati
NIP. 196204151990102001



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 <i>Aeromonas hydrophila/caviae</i>		Confidence: Excellent identification
SRF Organism	Bionumber: 1435713150500211		
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
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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 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: Spingomonas 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 Spingomonas paucimobilis Bionumber: 5001100300140011 Confidence: Good identification		
SRF Organism			
Analysis Organisms and Tests to Separate:			
Analysis Messages:			
Contraindicating Typical Biopattern(s)			
Spingomonas 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: Ill-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		Confidence: Excellent identification
	Bionumber: 1435713150500211		
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	IHI Sa	-	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:

Page 2 of 2

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		Confidence: Acceptable identification
SRF Organism	Bionumber: 1635717152526231		
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		Confidence: Excellent identification
SRF Organism	Bionumber: 1435713150500211		
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 13:01 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

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: