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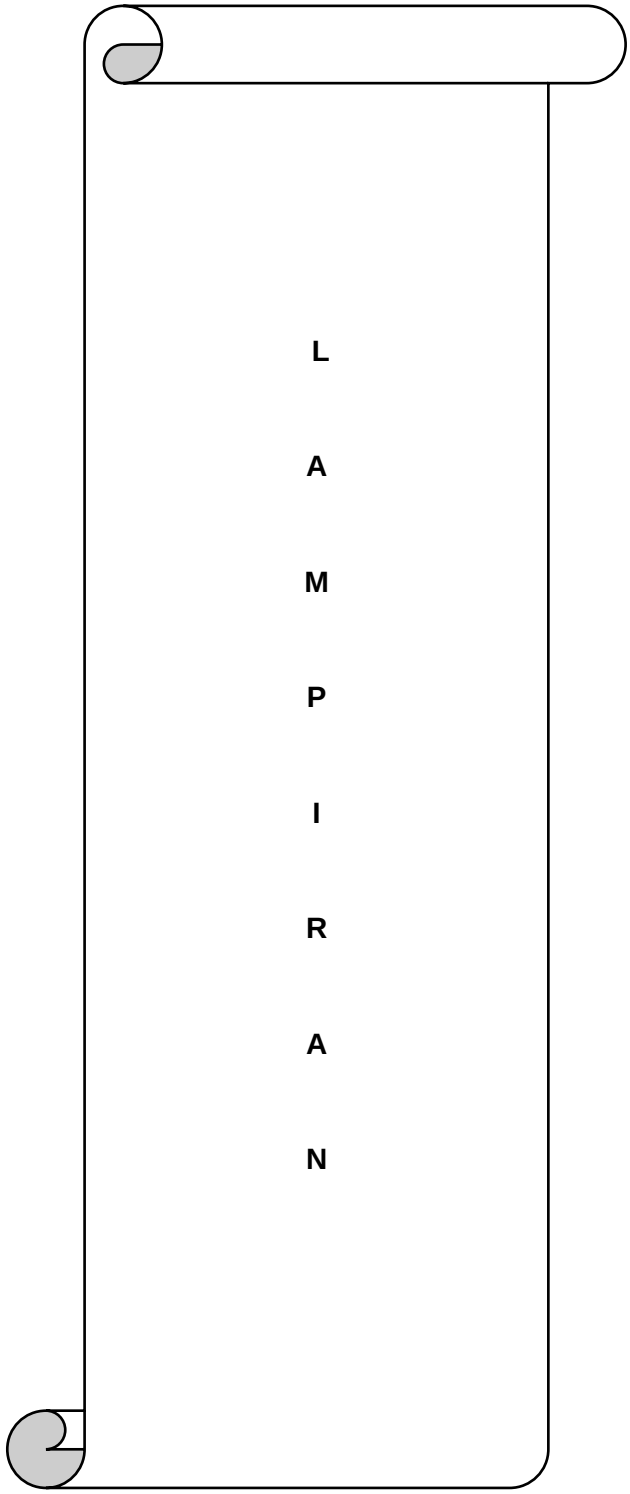
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GAMBAR SAMPEL

Epinephelus longispinis

Plectropomus leopardus

Sayatan sampel ikan

Pengambilan sampel yang di awetkan

Timbang Sampel

Sampel yang suda di peking

Lampiran 1. Alat dan Bahan Penelitian

Bahan	Alat
 Mikropipet	 Alkohon 96%
 Mikro tube 1,5 ml	 Qiagen blood and tissue kit
 Inkubator	 Buffer Tris-EDTA
 Autovlaf	 Aquades

Centrifuge

Bunsen

Vortex mixer

Trermal cycler

Timbangan digital

DNA magbead plus kit

Agarosa

Parafilm

MgCl2 Solution

Rady Mix PCR

 Electrophoresis chamber	

Lampiran 1. Sekuens gen COI ikan kerapu dari TPI Pota dan TPI Paotere

1. Sekuens gen COI L1EL

TTACGTATGGTGCCTGAGCCGGTATAGTAGGAACCGCCCTCAGCCTGCTTAT
TCGAGCTGAGCTGAGCCAGCCAGGGGCCCTACTTGGCGATGATCAAATTTAT
AACGTAATTGTAACAGCACATGCTTTCGTGATAATGTACCTTCTTTATAGTAAT
ACCAATTATGATTGGTGGCTTCGGAAACTGACTCATCCCACTTATGATTGGTG
CCCCAGACATGGCATTCCCCCGAATGAATAATATGAGCTTCTGACTCCTCCC
CCCATCATTCCTGCTTCTTCTAGCCTCCTCTGGAGTAGAAGCCGGAGCTTCA
TAACGGTCTATCCACCTTTAGCCGGGAACTTAGCCTTATGCCACGCAGGAAG
TAGTCCGTAGATTTAACCATCTTCTCACTACATCTAGCGGGGATCTCATCAAT
TCTAGGAGCAATTAACTTTATTACAACAATATTGTATTAACATAAAACCCCCAG
CCATTTCCCAGTACCAAACACCTTTATTTGTGTGAGCTGTCCTAATTACAGCA
GTTCTGCTGCTTCTGTCTCTTCCAGTCCTTGCTGCCGGTATTACAATACTTTT
AACAGACCGTAATCTTAACACCACTTTCTTTGACCCGGCCGGAGGGGGAGAC
CCTATTCTCTAC

2. Sekuens gen COI L1PL

CATTGGCACCCTTTATCTTGTATTTGGTGCCTGAGCCGGTATAGTAGGAACCG
CCCTCAGCCTGCTTATTCGAGCTGAGCTGAGCCAGCCAGGGGCCCTGCTCGG
CGATGATCAAATTTATAACGTAATTGTTACAGCACATGCTTTCGTAATAATTTTC
TTTATAGTAATACCAATTATGATTGGTGGCTTCGGAAACTGACTCATTCCACTTA
TAATCGGTGCCCCAGACATGGCATTCCCTCGAATGAATAATATAAGCTTCTGG
CTCCTCCCCCCATCCTTCCTGCTTCTACTAGCCTCCTCCGGAGTAGAAGCCGG
GGCTGGCACTGGTTGAACGGTCTATCCGCCTCTAGCCGGAAACCTAGCCCAC
GCAGGTGCATCCGTGGATTTAACCATCTTCTCACTACATCTAGCAGGGGTCTC
ATCAATCCTAGGGGCAATTAACTTTATTACAACGATTATTAACATAAAACCCCC
CGCTATTTCCCAATACCAAACACCTTTGTTTGTATGAGCTGTTTTAATTACGGC
AGTCCTGCTGCTCCTATCTCTTCCCGTCCTTGCCGCCGGTATTACAATACTCTT
AACGGACCGAAATCTCAACACTACTTTCTTTGACCCAGCCGGAGGGGGGGAC
CCCATCTCTACCAACACT-ATTCTGATTCA

3. Sekuens gen COI L2EL

TGAGCTGGAATGGTAGGAACTGCCTTAAGCCTACTAATTCGTGCAGAACTAAG
CCAGCCAGGGGCTCTCTTAGGCGATGACCAGATCTATAATGTAATCGTTACTG
CCCACGCATTCGTGATGATCTTCTTTATAGTAATGCCAATCATGATTGGCGGGT
TCGGAAACTGACTTATTCCTCTGATAATCGGCGCTCCTGATATAGCATTTCCTC
GAATAAATAACATAAGCTTCTGACTTCTCCCTCCTTCTTTCTTACTACTCCTTGC
CTCGTCTGGCGTAGAAGCGGGTGCTGGTACTGGATGAACAGTCTATCCACCC
CTGGCAGGTAATCTAGCCCACGCAGGTGCTTCTGTTGACTTAACTATTTTCTCT
CTTCACTTAGCAGGTATTTCATCAATTCTAGGGGCAATTAATTTCATTACAACTA
TTATTAACATAAAACCCCCAGCTATTTCTCAATACCAAACACCCCTCTTTGTCTG
AGCCGTACTTATCACTGCTGTATTGCTTCTTCTCTCCCTTCCAGTTCTCGCTGC
CGGTATTACAATATTATTAACAGACCGTAACCTTAACACCACTTTCTTTGACC
CAGCGGGAGGGGGAGACCCTATCTTACCAACACTATT

4. Sekuens gen COI L2PL

TAAGTGTTGGTAGAGATGGGGTCCCCCCCTCCGGCTGGGTCAAAGAAAGTAG
TGTTGAGATTTCGGTCCGTTAAGAGTATTGTAATACCGGCGGCAAGGACGGGA
AGAGATAGGAGCAGCAGGACTGCCGTAATTAAAACAGCTCATACAAACAAAGG
TGTTTGGTATTGGGAAATAGCGGGGGGTTTTATGTTAATAATCGTTGTAATAAA
GTTAATTGCCCCTAGGATTGATGAGACCCCTGCTAGATGTAGTGAGAAGATGG
TTAAATCCACGGATGCACCTGCGTGGGCTAGGTTTCCGGCTAGAGGCGGATA
GACCGTTCAACCAGTGCCAGCCCCGGCTTCTACTCCGGAGGAGGCTAGTAGA
AGCAGGAAGGATGGGGGGAGGAGCCAGAAGCTTATATTATTCATTCGAGGGA
ATGCCATGTCTGGGGCACCGATTATAAGTGGAATGAGTCAGTTTCCGAAGCCA
CCAATCATAATTGGTATTACTATAAAGAAAATTATTACGAAAGCATGTGCTGTAA
CAATTACGTTATAAATTTGATCATCGCCGAGCAGGGCCCCTGGCTGGCTCAGC
TCAGCTCGAATAAGCAGGCTGAGGGCGGTTCCTACTATACCGGCTCAGGCAC
CAAATCAAGATAAAG

Lampiran 2. Situs polimorfisme ikan kerapu yang diambil drai TPI Paotere dan TPI Pota berdasarkan gen mitokondria *COI.*

Haplo type	Kode Sampel	Polimorphik Site																																				
					1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	4	4	4	4	5	5	5	5	5	5	6			
		4	5	8	1	3	4	5	6	7	0	2	4	5	6	7	8	0	1	2	3	5	7	9	1	3	6	9	0	2	3	5	7	8	9	0		
H 1	L1PL	A	T	G	C	C	C	C	C	C	C	G	T	G	G	G	T	A	A	A	G	A	A	G	A	T	T	A	T	T	C	G	T	C	G	T		
H 2	L1EL	C	.	A	G	T	A	G	G	A	T	C	.	T	A	A	G	C	T	.	C	T	.	T	C	.	C	.	A	C	A	A	C	A	.	C		
H 3	L2PL	C	C	C	G	T	A	G	G	A	A	C	C	T	C	A	G	C	T	T	T	C	A	C	C	G	C	A	A	C	A	A	C	C	G	.		
H 4	L2EL	C	.	A	G	T	A	G	G	A	T	C	.	T	A	A	G	C	T	.	C	T	.	T	C	.	C	A	C	A	A	C	A	.	C	C		

lanjutan

p o y e	Kode sampel	Polimorphik Site																																				
					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
		9	9	9	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3	3	4	4	5									
		4	6	7	0	2	3	4	6	9	1	2	3	5	6	7	1	5	7	9	0	1	2	4	8	9	8	9	0									
	L1PL	G	A	A	G	A	G	A	G	A	A	G	G	A	T	G	C	A	A	A	A	C	A	G	C	C	C	A	A									
	L1EL	T	T	A	C	T	T	A	T	C	A	C	G	A	T	T	G	G	T	C	T	T	C	T	T	G	T	T	C									
	L2PL	A	T	T	G	A	.	A	T	G	.	T	T	.	T	T	T	T	C	T	T	G	T	T	C	A	A	A	G									
	L2EL	T	T	A	C	T	T	A	T	C	A	C	G	A	T	T	G	G	T	C	T	T	C	T	T	G	T	T	C									

lanjutan

p	Kode Sampel	Polimorphik Site																																				
		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
		0	0	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5				
		7	8	0	1	2	3	4	5	6	0	2	5	6	8	9	1	3	4	5	6	7	8	9	0	1	4	4	5	7	0	1	2	3				
	L1PL	A	A	G	T	A	A	T	T	G	C	C	A	G	T	G	T	G	G	C	C	C	C	T	G	C	T	A	T	G	A	G	A	G				
	L1EL	G	T	A	.	G	C	A	T	T	T	C	A	A	A	.	A	C	T	A	A	G	C	T	T	C	T	C	T	C	C	C	C	T				
	L2Pl	G	C	A	T	T	.	C	A	G	A	C	A	C	T	G	A	G	C	T	T	C	T	C	T	C	C	C	C	C	C	C	.	C				
	L2EL	G	T	A	.	G	C	A	T	T	T	C	A	A	A	.	A	C	T	A	A	G	C	T	T	C	T	C	T	C	C	C	C	T				

Lanjutan

Polimorphik Site																																						
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	0	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3	3	4	4	5	5	5	5	6	7	7	7	7	7	8								
6	9	1	2	3	5	6	7	1	5	7	9	0	1	2	4	8	9	8	9	0	3	8	9	4	0	1	7	8	9	1								
G	A	A	G	G	A	T	G	C	A	A	A	A	C	A	G	C	C	C	A	A	G	G	T	T	A	G	T	A	G	G								
T	C	A	C	G	A	T	T	G	G	T	C	T	T	C	T	T	G	T	T	C	A	A	C	G	C	C	T	A	C	T								
T	G	.	T	T	.	T	T	T	T	C	T	T	G	T	T	C	A	A	A	G	C	C	T	A	C	T	A	C	C	C								
T	C	A	C	G	A	T	T	G	G	T	C	T	T	C	T	T	G	T	T	C	A	A	C	G	C	C	T	A	C	T								

Lanjutan

hap Lo Type	Kode sampel	Polimorphik Site																													
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4
		7	7	7	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	0	0	0	0	0	1	1	1	1	1	2
		7	8	9	0	1	2	3	4	5	6	7	9	0	1	2	3	4	5	6	8	0	2	5	6	9	1	2	6	7	8	9	0
H 1	L1PL	G	G	G	G	G	A	G	G	A	G	C	A	A	G	A	A	G	C	T	A	A	T	T	C	T	G	A	A	A	T	G	C
H 2	L1EL	T	C	T	C	T	C	T	T	C	A	T	T	A	G	C	A	G	G	.	T	C	C	A	.	T	.	G	C	A	A	T	T
H 3	L2PL	A	C	T	T	C	A	.	T	A	G	C	.	G	G	G	C	C	C	C	A	C	T	G	G	C	A	A	T	T	A	T	T
H 4	L2EL	T	T	C	T	C	T	C	T	T	C	A	T	T	A	G	C	A	G	G	.	T	C	C	A	.	T	.	G	C	A	A	T

Lanjutan

Hap Lo Type	Koe sampel	Polimorphik Site																													
		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6		
		7	7	7	7	7	7	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	0	0	0	0	1				
		4	5	6	7	8	9	0	1	2	3	4	5	7	8	0	1	2	3	4	6	9	0	1	5	8	1				
H1	L1PL	C	G	C	C	G	G	G	G	C	C	C	T	G	G	C	T	G	G	C	T	A	G	C	C	A	T				
H2	L1EL	T	A	T	T	A	A	C	G	T	A	A	C	C	T	.	A	A	.	A	C	A	.	T	T	C	T				
H3	L2PL	T	G	T	A	A	T	C	T	C	A	A	T	A	T	A	C	T	T	C	T	T	C	C	C	C	A				
H4	L2EL	T	T	A	T	T	A	A	C	G	T	A	A	C	C	T	.	A	A	.	A	C	A	.	T	T	C				