

DAFTAR PUSTAKA

- Adam, Jaya, I & Sondita, MF. 2006. *Model Numerik Populasi Rajungan di Perairan Selat Makassar*. Jurnal Ilmu Perairan dan Perikanan Indonesia. 13 (2): 83-88
- Adlina, N, Fitri, ADP & Yulianto, T. 2013. *Perbedaan Umpan dan Kedalaman Perairan pada Bubu Lipat Terhadap Hasil Tangkapan Rajungan (*Portunus pelagicus*) di Perairan Betahlawang Demak*. Journal of Fisheries Resources Utilization Management and Technology. Vol. 3 No. 3, Tahun 2014, Hal. 19-27
- Arios, AH, Solichin, A & Saputra, SW. 2013. *Hasil Tangkapan Rajungan (*Portunus pelagicus*) dengan Menggunakan Alat Tangkap Bubu Lipat yang Didaratkan di TPI Sari Kabupaten Rembang*. Journal of Management of Aquatic Resources. Vol. 2, No. 2, Hal. 243-248
- Effendy, S, Sudirman, S, Bahri, E, Nurchayono, H, Batubara, M & Syaichudin. 2006. *Petunjuk Teknis Pembenihan Rajungan (*Portunus pelagicus* Linnaeus)*. Balai Budidaya Air Payau Kabupaten Takalar. Direktorat Jendral Perikanan Budidaya. Departemen Kelautan dan Perikanan. Takalar
- Ernawati, T. 2013. *Metode Pengkajian Stok dan Rekomendasi Pengelolaan Perikanan Rajungan*. Balai Penelitian Perikanan Laut
- Fachrudin L. & Musbir. 2012. *Penangkapan dan Pengolahan Kepiting Rajungan (*Portunus pelagicus*) di Sulawesi Selatan*. Respository Universitas Hasanuddin.
- FAO. 2019. *Species Fact Sheets Portunus pelagicus (Linnaeus, 1758)*. Fisheries and Aquaculture Departement.
- Gokce, G, Erguden, D, Sangun, L, Cekic, M & Alagoz, S. 2006. *Width/Length-weight and relationships of the blue crab (*Callinectes sapidus* Rathbun, 1986) population living in Camlik Lagoon Lake (Yumurtalik)*. Pakistan Journal of Biological Science. 9 (8): 1460-1464
- Government of Western Australia. 2011. *Fisheries Fact Sheet: Blue Swimmer Crab*. Department of Fisheries Western Australia. Western Australia.
- Hamid, A & Wardiatno, Y. 2015. *Population Dynamics of the Blue Swimming Crab (*Portunus pelagicus* Linnaeus, 1758)*. International Journal of the Bioflux Society. 8 (5).
- Hutabarat, S & Evans, SM. 2008. *Pengantar Oseanografi*. UI Press. Jakarta
- Ihsan. 2015. *Pemanfaatan Sumberdaya Rajungan (*Portunus pelagicus* Secara Berkelanjutan di Perairan Kabupaten Pangkajene Kepulauan Provinsi Sulawesi Selatan [Disertasi]*. Institut Pertanian Bogor. Bogor
- ITIS. 2018. *Portunus pelagicus (Linnaeus, 1758)*. <https://www.itis.gov>. Diakses pada 31 Juli 2019. Integrated Taxonomic Information System



- La Sara, O. & Astuti. 2011. *Reproduksi Biologi Kepiting Rajungan (Brachyura: Portunidae) Di Perairan Teluk Lasongko, Kabupaten Buton*. Laporan Penelitian. Lembaga Penelitian Universitas Halu Oleo. Kendari
- Lai, JCY, Ng, PKL & Davie, PJF. 2010. *A Revision of The Portunus pelagicus (Linnaeus, 1768) Species Complex (Crustacea: Brachyura: Portunidae), with The Recognition of Four Species*. The Raffels Bull of Zool. 58(2): 199-237
- Martasuganda, S. 2003. *Bubu (Trap)*. Departemen PSP FIKP IPB. Bogor
- Mawaluddin, Halili & Palupi, RD. 2016. *Komposisi Ukuran Kepiting Rajungan (Portunus pelagicus) Berdasarkan Fase Bulan di Perairan Lakara, Konawe Selatan, Sulawesi Tenggara*. Jurnal Manajemen Sumber Daya Perairan, 1(3): 299-310
- Menteri Kelautan Dan Perikanan Republik Indonesia. 2016. *Peraturan Menteri Kelautan dan Perikanan Republik Indonesia Nomor 56/PERMEN-KP/2016 Tentang Larangan Penangkapan Dan/Atau Pengeluaran Lobster (Panulirus spp.), Kepiting (Scylla spp.), dan Rajungan (Portunus spp.) dari Wilayah Negara Republik Indonesia*. Kementerian Kelautan Dan Perikanan Republik Indonesia.
- Nontji, A. 2007. *Laut Nusantara*. Cetakan Kelima. Djambatan. Jakarta
- Oh, CW & Hartnoll, RG. 1999. *Size at sexual maturity, reproductive output, and seasonal reproduction of Philoceras trispinosus Decapoda in Port Erin Bay, Isle of Man*. Journal of Crustacean Biology 19(2): 252-259. doi: 10.1163/193724099X00051
- Pauly, D. 1983. *Lenght converted catch curve: A Powerfull tool for fisheries research in the tropis (part 1)*. Fishbyte 1(2): 9-13
- Prasetyo, DG, Fitri, ADP & Yulianto, T. 2014. *Analisis Daerah Penangkapan Rajungan (Portunus pelagicus) Berdasarkan Kedalaman Perairan Dengan Jaring Arad (Mini Trawl) di Perairan Demak*. Journal of Fisheries Resources Utilization Management and Technology. Volume 3, nomor 3. Tahun 2014. Hlm 257-266
- Prihatiningsih & Wagiyo, K. 2012. *Sumberdaya Rajungan (Portunus pelagicus) di Perairan Tangerang*. Jurnal Bawal. 2 (6): 237-282
- Rasheed, S & Mustaquim, J. 2014. *Relative Growth and Morphometric Measurements as an index for Estimating Meat Yield of two edible crabs Portunus pelagicus and P. sanguinolentus from the coastal waters of Pakistan*. International Journal of Innovation and Applied Studies. ISSN: 2028-9324. 9 (4): pp. 1994-2009
- Rusfayeni, M. 2017. *Dinamika Populasi dan Status Stok Rajungan (Portunus pelagicus) di Perairan Kabupten Rembang Jawa Tengah*. Institut Pertanian Bogor. Bogor. 42 hal.
- Saputra, WS, Prijadi, S & Gabriela, AS. 2009. *Beberapa Aspek Biologi Ikan Kuniran (Upeneus spp.) di Perairan Demak*. Jurnal Saintek Perikanan. 5 (1):1-6



HA & Wirastruya, A. 2016. *Hubungan Antara Daerah Penangkapan Rajungan (Portunus pelagicus) Dengan Parameter Oseanografi di Perairan Tegal Jawa Tengah*. Prosiding Aplikasi Iptek Perikanan dan Kelautan Dalam Pengelolaan Sumber Daya Perikanan dan Degradasi Wilayah Pesisir, Laut dan Pulau-pulau Kecil. Universitas Diponegoro. Semarang. ISSN: 2339-0883

- Sugilar, H, Park, YC, Han, DW, & Han, KN. 2012. *Population dynamics of the swimming crab Portunus trituberculatus (Miers, 1876) (Brachyura: Portunidae) from the West sea of Korea*. International Journal of Oceanography and Marine Ecological System 1 (2): 36-49. Doi: 10.3923/ijomens 2012.36.49
- Sunarto. 2012. *Karakteristik Bioekologi Rajungan (Portunus pelagicus) di Perairan Laut Kabupaten Brebes [disertasi]*. Institut Pertanian Bogor. Bogor. 171 hlm.
- Wibisono, Y. 2009. *Metode Statistical*. Gajad Mada Universitas Press. 724 hal.
- Zairion. 2015. *Pengelolaan Berkelanjutan Perikanan Rajungan (Portunus pelagicus) di Lampung Timur*. [Disertasi]. Institut Pertanian Bogor. Bogor. 264 hal.
- Zairion, Boer, M, Wardianto, Y & Fahrudin, A. 2014. *Komposisi dan Ukuran Rajungan (Portunus pelagicus) yang Tertangkap Pada Beberapa Stratifikasi Batimetri di Perairan Lampung Timur*. J. Lit. Perikanan. Ind. Vol.20 No.4: 199-206



LAMPIRAN



Lampiran 1. Dokumentasi kegiatan penelitian



Gambar kepiting rajungan jantan



Gambar kepiting rajungan betina



Gambar pengukuran berat kepiting rajungan



Gambar pengukuran panjang karapas kepiting rajungan



Lampiran 2. Hasil tangkapan kepiting rajungan

No.	Nama	Lokasi penangkapan		Jumlah	Berat (Kg)	Kedalaman (m)	Suhu (°C)
		Bujur	Lintang				
1	Ambo	119,462347	-5,079046	33	1,74	1,3	29
2	Arif	119,464310	-5,077198	40	1,83	1,2	29
3	Boddo'	119,463040	-5,074425	37	1,73	1,7	28
4	Gafar	119,455878	-5,077544	52	2,23	2,5	28
5	Indraming	119,462462	-5,069689	41	1,95	1,9	28
6	Kacce	119,447792	-5,066686	121	5,11	3,7	27
7	Kadir	119,448947	-5,070382	90	3,47	3,5	27
8	Mursalim	119,457380	-5,065877	113	4,77	2,8	28
9	Ocas	119,465350	-5,071191	44	1,92	1,4	29
10	Rahman	119,451142	-5,075580	54	2,64	3,2	27
11	Sanawing	119,452990	-5,071653	82	3,34	3,1	27
12	Sarifuddin	119,465581	-5,074772	38	1,73	1,1	29
13	Sumang	119,448023	-5,077313	41	1,95	3,4	27
		Total		786	34,41		



Lampiran 3. Tabel sex ratio berdasarkan tanggal pengamatan dan kedalaman

Tanggal pengamatan	Jumlah (ekor)		Total	Sex ratio	
	Jantan	Betina		Jantan	Betina
15 Mei 2018	96	63	159	1,00	0,66
23 Mei 2018	76	83	159	1,00	1,09
26 Mei 2018	69	85	154	1,00	1,23
5 Juni 2018	77	80	157	1,00	1,04
9 Juni 2018	88	69	157	1,00	0,78
Jumlah	406	380	786	1,00	0,94

❖ Jantan

- 15 Mei : $(159 \times 406) / 786 = 82,1298$
- 23 Mei : $(159 \times 406) / 786 = 82,1298$
- 26 Mei : $(154 \times 406) / 786 = 79,5471$
- 5 Juni : $(157 \times 406) / 786 = 81,0967$
- 9 Juni : $(157 \times 406) / 786 = 81,0967$

❖ Betina

- 15 Mei : $(159 \times 380) / 786 = 76,8702$
- 23 Mei : $(159 \times 380) / 786 = 76,8702$
- 26 Mei : $(154 \times 380) / 786 = 74,4529$
- 5 Juni : $(157 \times 380) / 786 = 75,9033$
- 9 Juni : $(157 \times 380) / 786 = 75,9033$

$$\chi^2 = \frac{(9 - 8,1)^2}{8,1} + \frac{(7 - 8,1)^2}{8,1} + \frac{(6 - 7,5)^2}{7,5} + \frac{(7 - 8,0)^2}{8,0} + \frac{(8 - 8,0)^2}{8,0} + \frac{(6 - 7,8)^2}{7,8} + \frac{(8 - 7,8)^2}{7,8} + \frac{(8 - 7,4)^2}{7,4} + \frac{(8 - 7,9)^2}{7,9} + \frac{(6 - 7,9)^2}{7,9} = 10,3275$$

Nilai Chi-square tabel $\chi^2_{(0,05)(4)} = 9,4877$

Karena $\chi^2_{hitung} > \chi^2_{tabel}$ maka tolak H_0 (jenis kelamin kepiting jantan dan betina terdapat perbedaan nyata)



Lampiran 3 (lanjutan)

Kedalaman perairan	Jumlah (ekor)		Total	Sex ratio	
	Jantan	Betina		Jantan	Betina
Stratum 1 (<1,5)	85	70	155	1,00	0,84
Stratum 2 (1,5-2,5)	128	115	243	1,00	0,90
Stratum 3 (>2,5)	193	195	388	1,00	1,01
Jumlah	406	380	786	1,00	0,94

❖ Jantan

Stratum 1 : $(155 \times 406) / 786 = 80,0636$
 Stratum 2 : $(243 \times 406) / 786 = 125,5191$
 Stratum 3 : $(388 \times 406) / 786 = 200,4173$

❖ Betina

Stratum 1 : $(155 \times 380) / 786 = 74,9364$
 Stratum 2 : $(243 \times 380) / 786 = 117,4809$
 Stratum 3 : $(388 \times 380) / 786 = 187,5827$

$$\chi^2 = \frac{(8 - 8,0)^2}{8,0} + \frac{(1 - 1,5)^2}{1,5} + \frac{(1 - 2,4)^2}{2,4} + \frac{(7 - 7,9)^2}{7,9} + \frac{(1 - 1,4)^2}{1,4} + \frac{(1 - 1,5)^2}{1,5} = 1,2988$$

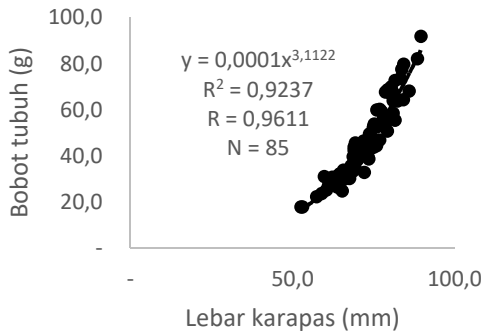
Nilai Chi-square tabel $\chi^2_{(0,05)(2)} = 5,9915$

Karena $\chi^2_{hitung} < \chi^2_{tabel}$ maka terima H_0 (jenis kelamin kepiting jantan dan betina tidak terdapat perbedaan)

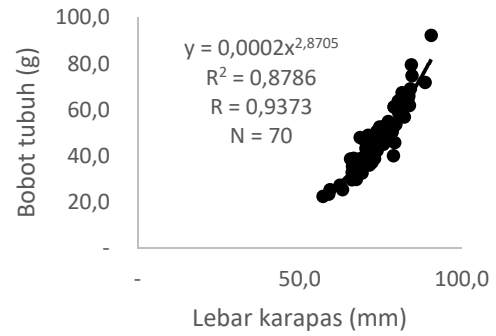


Lampiran 4. Hubungan lebar karapas dan bobot rajungan setiap kedalaman

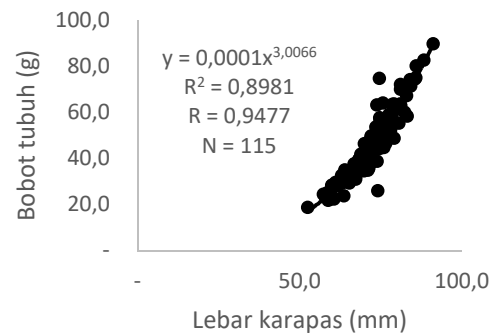
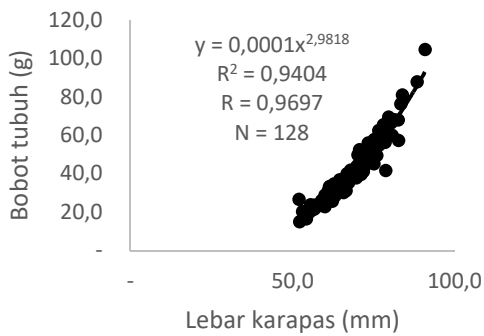
(a) Jantan



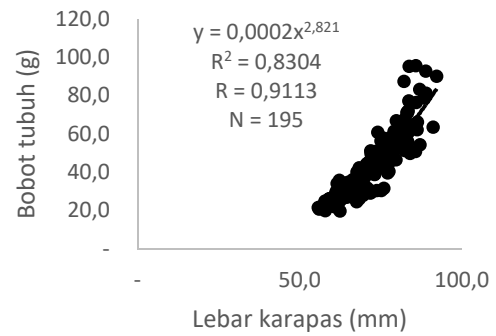
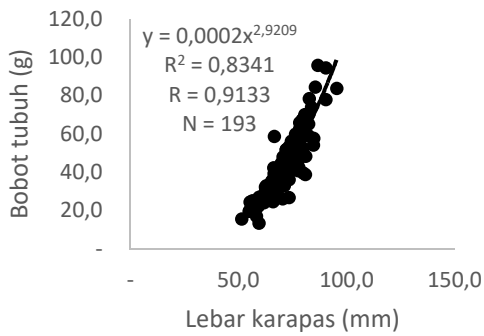
(b) Betina



Stratum 1 (kedalaman <1,5 m)



Stratum 2 (kedalaman 1,5 – 3 m)



Stratum 3 (kedalaman >3 m)



Lampiran 5. Hasil uji-T nilai b

t-Test: Paired Two Sample for Means			t-Test: Paired Two Sample for Means		
	Log L	Log W		Log L	Log W
Mean	1,870232	1,665018	Mean	1,853852	1,628949
Variance	0,001773	0,016632	Variance	0,002313	0,024254
Observations	70	70	Observations	85	85
Pearson Correlation	0,93734		Pearson Correlation	0,961078	
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	69		df	84	
t Stat	18,93289		t Stat	18,79542	
P(T<=t) one-tail	2,46E-29		P(T<=t) one-tail	3,9E-32	
t Critical one-tail	1,667239		t Critical one-tail	1,663197	
P(T<=t) two-tail	4,93E-29		P(T<=t) two-tail	7,8E-32	
t Critical two-tail	1,994945		t Critical two-tail	1,98861	

Stratum 1 (kedalaman < 1,5 m)

t-Test: Paired Two Sample for Means			t-Test: Paired Two Sample for Means		
	Log L	Log W		Log L	Log W
Mean	1,832844	1,595402	Mean	1,853801	1,634155
Variance	0,002837	0,026819	Variance	0,002478	0,024942
Observations	128	128	Observations	115	115
Pearson Correlation	0,969733		Pearson Correlation	0,947667	
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	127		df	114	
t Stat	23,80039		t Stat	21,05125	
P(T<=t) one-tail	6E-49		P(T<=t) one-tail	2,2E-41	
t Critical one-tail	1,65694		t Critical one-tail	1,65833	
P(T<=t) two-tail	1,2E-48		P(T<=t) two-tail	4,41E-41	
t Critical two-tail	1,97882		t Critical two-tail	1,980992	

Stratum 2 (kedalaman 1,5 – 3 m)

t-Test: Paired Two Sample for Means			t-Test: Paired Two Sample for Means		
	Log L	Log W		Log L	Log W
Mean	1,843627	1,597917	Mean	1,853926	1,609137
Variance	0,002198	0,022478	Variance	0,002299	0,022032
Observations	193	193	Observations	195	195
Pearson Correlation	0,913289		Pearson Correlation	0,911248	
Hypothesized Mean Difference	0		Hypothesized Mean Difference	0	
df	192		df	194	
t Stat	31,37344		t Stat	32,07127	
P(T<=t) one-tail	8,4E-78		P(T<=t) one-tail	8,81E-80	
t Critical one-tail	1,652829		t Critical one-tail	1,652746	
P(T<=t) two-tail	1,68E-77		P(T<=t) two-tail	1,76E-79	
t Critical two-tail	1,972396		t Critical two-tail	1,972268	

Stratum 3 (kedalaman > 3 m)

