

## DAFTAR PUSTAKA

- Aji, L.P., Widyastuti, A. dan Capriati, A. 2018. Struktur Komunitas Moluska di Padang Lamun Perairan Kepulauan Padaido dan Aimando Kabupaten Biak Numfor, Papua. *Jurnal Oseanologi dan Limnologi di Indonesia*. Vol.3(3): 219- 234.
- Aji L.P., Widyastuti A., dan Fatrwas Y. 2015. Katalog Moluska Unit Pelaksana Teknis Loka Konservasi Biota Laut Biak Seri 1 Gastropoda: Strombidae. Pusat Penelitian Oseanografi. Lembaga Ilmu Penelitian Indonesia.
- Akbar A., Wulandari S.Y., dan Maslukah L. 2016. Konsentrasi Bahan Organik Total (BOT) dan Logam Berat Timbal (Pb) di Sedimen Perairan Pantai Tasikagung, Rembang. *Jurnal Oseanografi*. Vol. 5 (4): 496-504.
- Alkautsar M.D., Suryono C.A., dan Praktiko I. 2022. Korelasi Antara Ukuran Butir Sedimen Non Pasir dengan Kandungan Bahan Organik di Perairan Morodemak, Kabupaten Demak. *Journal of Marine Research*. Vol. 11(3): 391-398.
- Arianti, N.D., Efrizal, T., Fajri, N.El,. 2013. *Abundance Of Dog Conch (Strombus turturella) in Coastal Area Tanjungpinang Kota Subdistrict, Tanjungpinang City. University of Riau : Riau.*
- Arini I., dan Nurjana S. 2021. Hubungan Faktor Fisik Kimia Lingkungan Terhadap Kepadatan dan Pola Distribusi Siput Gonggong (*Strombus* sp.) di Padang Lamun Perairan Pantai Desa Suli dan Implikasinya dalam Pembelajaran Biologi. *Jurnal Biology Science & Education*. Vol. 10(1): 1-9.
- Brower J. Jernold, Z., Von Ende, C. 1990. *Field and Laboratory Methods for General Ecology. Third Edition. USA: W. M. C. Brown Publishers.*
- Brown R.L., Reilly L.A., dan Peet R. 2016. *Species Richness: Small Scale.*
- Cappenberg H.A.W. 2016. Keanekaragaman Jenis Gastropoda di Teluk Lampung. *Jurnal Ilmu dan Teknologi Kelautan Tropis*. Vol. 8(1): 237-248
- Cob Z.C., Arshad A., Bujang J.S. 2009. *Species Description and Distribution of Strombus (Mollusca: Strombidae) in Johor Straits and its Surrounding Areas. Sains Malaysiana*. Vol. 38(1): 39-46.
- ..., Bakar Y., Simon K.D., dan Mazlan A.G. 2012. *Habitat Preference Strombus canarium Linnaeus, 1758 (Gastropoda: Strombidae) in grass Beds. Italian Journal of Zoology*. Vol. 79(3): 459-467.



- Dinata H.N., Henri., dan Adi W. 2022. Analisis Habitat Gastropoda pada Ekosistem Lamun di Perairan Pulau Semujur, Bangka Belitung. *Jurnal Ilmiah Sains*. Vol. 22(1): 49-59.
- Dody, S., dan Marasabessy M.D. 2007. Sebaran Spasial Siput Gonggong (*Strombus turturella*) di Teluk Klabat, Bangka Belitung. *Prosiding Seminar Nasional Moluska*. Institut Pertanian Bogor: Bogor.
- Eisenberg dan Jerome M. 1981. *A Collector's Guide to Seashells of the World*. Newyork: McGraw-Hill Book Company.
- Fabio C. Ruaza Jr dan Danilo T.Dy. 2016. *Morphological Variation in the Shell of Strombus (Mollusca: Gastropoda) Across Several Local Habitats in Surigao del Sur*, Southern Philippines. *Multidisciplinary Research Journal*. Vol. 4: 11-16.
- Fifiyanti R., Supratman O., dan Utami E. 2020. Kepadatan *Strombus turturella* dengan Faktor Lingkungan Perairan Teluk Kelabat Kepulauan Bangka Belitung. *Journal of Tropical Marine Science*. Vol. 3 (1): 28-34.
- A.S., Tupan I. 2020. Keanekaragaman Gastropoda Pada Habitat Lamun Di Perairan Desa Tayando Yamtel Kecamatan Tayando Tam Kota Tual. *Jurnal Biologi Science & Education*. Vol. 9(2): 163-176.
- Gemilang W.A., Wisha U.J., dan Kusumah G. 2017. Distribusi Sedimen Dasar Sebagai Identifikasi Erosi Pantai di Kecamatan Brebes Menggunakan Analisis Granulometri. *Jurnal Kelautan*. Vol. 10(1): 54-66.
- Hasriyanti., Syarif E., dan Maddatuang. 2015. Analisis Karakteristik Kedalaman Perairan, Arus dan Gelombang di Pulau Dutungan Kabupaten Barru. *Jurnal Scientific Pinisi*. Vol. 1(1): 45-54.
- Hati N., Karlina I., Anggraini R., Nugraha A.H., Idris F., dan Hidayati J.R. 2022. Asosiasi Siput Gonggong (*Strombus sp.*) pada Ekosistem Lamun di Pesisir Timur Pulau Bintan. *Jurnal Kelautan Tropis*. Vol. 25(2): 141-148.
- Haumahu S., Unepetty P., dan Tuapattinaja M.A. 2014. Variasi Morfometrik dan Hubungan Panjang Berat Siput Jala (*Strombus luhuanus*). *Jurnal Triton*. Vol.10(2): 122-130.
- Henny., Eddiwan., dan Efawani. 2019. *Morphometric, Meristic, and Growth Patterns of turturella from the Dompok Island Coastal Area, Tanjungpinang* u. *Asian Journal of Aquatic Science*. Vol. 2(1): 57-64.



dan Adirman. 2019. *Types and Density of Seagrass in The Genting g Medang Village, Rupert Utara District, Bengkalis Regency, Riau* n *Journal of Aquatic Sciences*. Vol. 2:119-126.

- Hidayah Z. 2003. Pengaruh Kondisi Sedimen Terhadap Struktur Komunitas Makrozoobenthos di Muara Sungai Donan Cilacap Jawa Tengah. Skripsi. Fakultas Perikanan dan Ilmu Kelautan. Institut Pertanian Bogor: Bogor.
- Ira, Rahmadani dan Irawati N. 2015. Keanekaragaman dan Kepadatan Gastropoda di Perairan Desa Morindino Kecamatan Kambowa Kabupaten Buton Utara. *Aquasains Jurnal Ilmu Perikanan dan Sumberdaya Perairan*. Vol. 3(2): 265-271.
- Islami M.M. 2017. Catatan Kekayaan Jenis Gastropoda di Pesisir Pulau Leti, Kawasan Banda Selatan. *Berita Biologi*. Vol, 16(1): 95-99.
- Ismail K., Angraini S.F., dan Hendrik. 2015. Penguatan Ketahanan Pangan Melalui Keberlanjutan Sumberdaya Perikanan Khas Lokal Siput Gonggong (*Strombus canarium*). Makalah. Seminar Nasional Kelautan dan Perikanan II: Makassar.
- Isman M., Mashoreng S., Werorilangi S., Isyrini R., Rastina, Faizal A., Tahir A., dan Burhanuddin A.I. 2018. Komunitas Makrozoobentos pada Kondisi Mangrove Berbeda: Hubungannya dengan Karakteristik Kimia-Fisika Sedimen. *Torani*. Vol.1 (2): 40-47.
- Isman M. 2016. Hubungan Makrozoobentos dengan Bahan Organik Total (BOT) Pada Ekosistem Mangrove di Kelurahan Ampalas Kec. Mamuju Kab. Mamuju Sulawesi Barat. Skripsi. Fakultas Ilmu Kelautan dan Perikanan Universitas Hasanuddin: Makassar. Janiati, Prayogo H., dan Yani A. 2022. Keanekaragaman Jenis Gastropoda Pada Ekosistem Hutan Mangrove di Desa Sungai Nilam Kecamatan Jawai Kabupaten Sambas. *Jurnal Hutan Lestari*. Vol. 10(3): 597-6-5.
- Keputusan Menteri Lingkungan Hidup (KMLH) No. 51 Tahun 2004. Baku Mutu Air Laut Untuk Biota. Jakarta
- Khodijah dan Angraini S.F. 2015. Keberlanjutan Populasi Siput Gonggong (*Strombus canarium*). *Jurnal Mitra Bahari*. Vol. 9(1).
- Kinasih A.G., Perdanawati R.A., Munir M. 2018. Studi Hubungan Struktur Komunitas Makrobenthos dengan Kualitas Perairan di Rumah Mangrove Wonorejo, Surabaya. *Prosiding Seminar Nasional Kelautan dan Perikanan IV*.
- Krebs, C.J. 1998. *Ecological Methodology*. 2nd Ed, Addison-Welsey Education Publishers, California.



Bioekologi dan Reproduksi Siput Gonggong *Strombus canarium* (2018). Skripsi. Fakultas Ilmu Kelautan dan Perikanan Universitas Makassar.

to B., dan Riniatsih I. 2021. Kondisi Padang Lamun di Perairan Jeparo Terkait dengan Parameter Lingkungan Perairan dan

Keberadaan Sampah Makro Plastik. *Journal of Marine Research*. Vol. 10(1): 29-38.

Laporan Status Lingkungan Hidup Daerah Kabupaten Majene. 2007.

Liswahyuni A. 2014. Aspek Biologi; Siput Strawberry (*Strombus luhuanus*) di Perairan Kepulauan Sembilan Kabupaten Sinjai. Tesis. Program Pascasarjana. Universitas Hasanuddin: Makassar.

Magurran, A.E. 1988. *Ecological Diversity and Its Measurement*. Princeton University Press: New Jersey

Maniagasi R., Tumembouw S.S. dan Mundeng Y. 2013. Analisis Kualitas Fisika Kimia Air di Areal Budidaya Ikan Danau Tondano Provinsi Sulawesi Utara. *Budidaya Perairan*. Vol. 1(2): 29-37.

Mashoreng, S. 2017. Perubahan Penyerapan Karbon Di Pulau Barranglompo Kurun Waktu Tahun 2001-2016. Makalah Seminar Nasional Tahunan XIV Hasil Penelitian Perikanan Dan Kelautan, Tanggal 22 Juli 2017 Di Yogyakarta.

Melay S., Tuapattinaya P.M.J., dan Sangadji F. 2015. Kajian Faktor Lingkungan dan Identifikasi Filum Mollusca, Filum Echinodermata di Ekosistem Padang Lamun Perairan Pantai Negeri Tulehu Kabupaten Maluku Tengah. *Bioappendix*. Vol. 1(2): 113-120.

Mornaten B., dan Kilay H.N. 2022. Identifikasi Keragaman, Jenis Gastropoda di Perairan Pantai Desa Hutumuri Kecamatan Leitimur Selatan. *Biofaal Jurnal*. Vol. 3(1): 51-64.

Mushthofa A., Muskananfolo M.R., dan Rudiyaniti S. 2014. Analisis Struktur Komunitas Makrozoobenthos sebagai Bioindikator Kualitas Perairan Sungai Wedung Kabupaten Demak. *Diponegoro Journal of Maquares*. Vol. 3(1): 81-88.

Muzahar dan Hakim A.A. 2018. *Spawning and Development of Dog Conch Strombus sp. Larvae in the Laboratory*. *Jurnal Ilmu dan Teknologi Kelautan Tropis*. Vol. 10(1): 209-216.

Muzahar dan Viruly L. 2020. Identifikasi, Reproduksi dan Karakterisasi Profil Protein Siput Gonggong-Ikon Kota Tanjung Pinang. Tanjung Pinang: Umrah Press.



awan D., Suryanti A., Muzahar., dan Susiana. 2021. Makanan dan Perilaku Makan Siput Gonggong (*Laevistrombus turturella*) di Perairan Pulau Tanjungpinang Oseanologi dan Limnologi di Indonesia. Vol 6(1):

Nirmala I.V., Sumardiono B., dan Hartoko A. 2019. Analisis Densitas *Emerita emeritus* Terhadap Tekstur dan Bahan Organik Sedimen di Pantai Glagah, Kulon Progo, Yogyakarta. Jurnal Pasir Laut. Vol.4(2): 69-78.

Odum, E., P. 1993. Dasar-Dasar Ekologi. Yogyakarta: Gadjah Mada University Press.

Padilah. 2017. Struktur Komunitas Siput Gonggong (*Strombus* sp.) dan Analisa Kesesuaian Habitatnya di Perairan Desa Mantang Baru Bintan. Skripsi. Fakultas Ilmu Kelautan dan Perikanan Universitas Maritim Raja Ali Haji: Tanjungpinang.

Purbosari A. 2020. Keanekaragaman dan Dstribusi Gastropoda di Rawapening Kabupaten Semarang Jawa Tengah. Skripsi. Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Semarang: Semarang.

Putra W.P.E.S., Santoso D., dan Syukur A. 2021. Keanekaragaman dan Pola Sebaran Moluska (Gastropoda dan Bivalvia) yang Berasosiasi Pada Ekosistem Mangrove di Pesisir Selatan Lombok Timur. Jurnal Sains Teknologi dan Lingkungan.

Rachmawati D.O., Risha N., dan Suswandi I. 2023. Kelimpahan Material Magnetik di Pasir Hitam. Jurnal Sins dan Teknologi. Vol.12(1): 200-209.

Ramses, Syamsi F., dan Notowinarto. Karakteristik Morfometrik, Pola Sebaran, Kepadatan dan Kondisi Lingkungan Siput Gonggong *Strombus canarium* Linnaeus, 1758 di Perairan Kota Batam. Simbiosis. Vol. 7(2): 95-108.

Rau A.R., Kusen J.D., dan Paruntu P. 2013. Struktur Komunitas Moluska di Vegetasi Mangrove Desa Kulu, Kecamatan Wori, Kabupaten Minahasa Utara. Jurnal Pesisir dan Laut Tropis. Vol. 2(1): 44-50.

Ricky M. 2016. Kelimpahan dan Pemanfaatan Siput Gonggong (*Strombus* sp.) di Kampung Madong Kelurahan Kampung Bugis Kota Tanjungpinang. Skripsi. Fakultas Ilmu Kelautan dan Perikanan Universitas Maritim Raja Ali Haji: Tanjungpinang.

Riniatsih I. 2015. Distribusi Muatan Padatan Tersuspensi (MPT) di Padang Lamun di Perairan Teluk Awur dan Pantai Prawean Jepara. Jurnal Kelautan Tropis. Vol. 18(3): 121-126.

Rismawati W.O, Ishak E., Halili., dan Wahyudi A.I. 2024. Kelimpahan dan Pola Sebaran Siput Gonggong di Ekosistem Lamun Perairan Desa Gerak Makmur Kecamatan Kabupaten Buton Selatan. Innovative: Journal of Social Science 4(2): 7247-7258.

S., dan Prihadi D.J. 2016. Kelimpahan dan Kondisi Habitat Siput (*Strombus turturella*) di Pesisir Kabupaten Bintan, Kepulauan Riau. Jurnal Kelautan. Vol. 7(2): 35-44.



- Ruaza F.C. dan Danilo T. 2016. Morphological Variation in the Shell of *Strombus* (Mollusca: Gastropoda) Across Several Local Habitats in Surigao del Sul, Southern Philippines. *SDSSU Multidisciplinary Research Journal*. Vol.(4): 11-16.
- Savazzi, E. 1991. Constructional Morphology of Strombid Gastropods. *Lethaia*. Vol. 24: 311-331.
- Salmanu S.I.A. 2021. Variasi Morfometrik Cangkang Gastropoda Family Strombidae Pada Ekosistem Lamun Desa Suli Pulau Ambon. *Biopendix*. Vol. 7(2): 117-122.
- Salmanu S.I.A., dan Lilino S. 2023. Pola Pertumbuhan *Strombus luhuanus* Linn. 1758 di Perairan Pantai Desa Oma Pulau Haruku Kabupaten Maluku Tengah (Kajian Monitoring). *Biopendix*. Vol.9(2): 263-267.
- Setianingrum R., Weliyadi E., dan Roem M. 2022. Asosiasi Echinoidea dengan Komunitas Lamun di Perairan Pulau Derawan. *Journal of Aquatropica Asia*. Vol.7(2): 104-116.
- Siahaan S.J.R. 2021. Keanekaragaman dan Pola Distribusi Moluska di Pantai Mangrove Desa Sei Nagalawan, Kecamatan Perbaungan, Kabupaten Serdang Berdagai, Provinsi Sumatera Utara. Skripsi. Fakultas Pertanian Universitas Sumatera Utara: Medan.
- Sianu N.E., Sahami F.M., dan Kasim F. 2014. Keanekaragaman dan Asosiasi Gastropoda dengan Ekosistem Lamun di Perairan Teluk Tomini. *Nike: Jurnal Ilmiah Perikanan dan Kelautan*. Vol. 2(2): 156-163.
- Silubun D.T., dan Almohdar E. 2022. Kelimpahan dan Pemanfaatan Siput Jala (*Strombus luhuanus*) di Perairan Dullah Laut. *Jurnal Perikanan Kamasan*. Vol. 2(2): 70-88.
- Simajuntak S.L., Muskananfola M.R., dan Taufani W.T. 2018. Analisis Tekstur Sedimen dan Bahan Organik Terhadap Kelimpahan Makrozoobenthos di Muara Sungai Jajar, Demak. *Journal of Maquares*. Vol. 7 (4): 423-430.
- Sitanggang G.R., Rangan J.K., Moningkey R.D., Lalita J.D.J., dan Schaduw J.N.W. struktur Komunitas Gastropoda Pada Ekosistem Lamun di Perairan Gangga Minahasa Utara. *Jurnal Ilmiah Platax*. Vol. 9(2): 304-313.
- Sofiana N. 2017. Pengelolaan Sumberdaya Gonggong (*Strombus* sp.) Berbasis Pemanfaatan di Perairan Pesisir Tanjung Qudus Dusun III Desa Pangkil Muk Bintang Kabupaten Bintang Provinsi Kepulauan Riau. Skripsi. Kelautan dan Perikanan Universitas Maritim Raja Ali Haji: .
- Syamsuddin T.S. 2018. Karakteristik Habitat Siput Gonggong *urella* di Ekosistem Padang Lamun. *Jurnal Kelautan Tropis*. 0.



- Supratman O., Rosalina D., dan Adi Wahyu. 2014. Kelimpahan Siput Gonggong (*Strombus* spp.) yang Berasosiasi dengan Padang Lamun di Pantai Desa Tukak Kabupaten Bangka Selatan. *Akuatik Jurnal Sumberdaya Perairan*. Vol. 8(1): 23-31.
- Susana T. 2009. Tingkat Keasaman (Ph) dan Oksigen Terlarut Sebagai Indikator Kualitas Perairan Sekitar Muara Sungai Cisadane. *JTL*. Vol. 5(2): 33-39.
- Sutriani dan Harum M. 2021. Penataan Pola Bangunan dan Lingkungan Tanggap Bencana pada Daerah Pesisir di Kabupaten Majene, Sulawesi Barat. *Losari: Jurnal Arsitektur Kota dan Pemukiman*. Vol. 6(1): 1-14.
- Syahrial., Larasati C.E., Saleky D., dan Isma M.F. 2020. Komunitas Fauna Makrozoobentos di Kawasan Reboisasi Mangrove Kepulauan Seribu: Faktor Lingkungan, Distribusi, Ekologi Komunitas, Pola Sebaran dan Hubungannya. *Aquatic Sciences Journal*. Vol. 7(2): 87-97.
- Tetiwar W., Smith A., dan Liline S. 2024. Keanekaragaman Jenis Gastropoda di Padang Lamun Perairan Pantai Desa Rutong. *Biopendix*. Vol. 10(2): 259-265.
- Tissot B., dan Pelet R. 1981. *Sources and Fate of Organic Matter in Ocean Sediments*. *Oceanologica Acta*. 1980: 97-103.
- Trisyani N. 2018. Monograf Sebaran Kerang Pisau (*Solen* sp.) di Pantai Indonesia (Studi di Pantai Pamekasan, Bangkala, Surabaya, Cirebon dan Jambi). Skripsi. Hang Tuah Press: Surabaya.
- Triwiyanto K., Suartini N.M., dan Subagio J.N. 2015. Keanekaragaman Moluska di Pantai Serangan, Desa Serangan, Kecamatan Denpasar Selatan, Bali. *Jurnal Biologi*. Vol. 19(2): 63-68.
- Tuheitu H. 2020. Keragaman Gastropoda Pada Perairan Pantai Negeri Buano Kecamatan Waesala Kabupaten Seram Bagian Barat. Skripsi. Fakultas Ilmu Tarbiyah dan Keguruan Institut Agama Islam Negeri (IAIN): Ambon.
- Ulmaula Z., Purnawan S., dan Sarong M.A. 2016. Keanekaragaman Gastropoda dan Bivalvia Berdasarkan Karakteristik Sedimen Daerah Intertidal Kawasan Pantai Ujung Pancu Kecamatan Peukan Bada Kabupaten Aceh Besar. *Jurnal Ilmiah Mahasiswa Kelautan dan Perikanan Unsyiah*. Vol. 1(1): 124-134.



i Bioekologi Habitat Siput laut gonggong (*Labiostrombus epidromis*) Teluk Klabat, Kabupaten Bangka Barat, Provinsi Kepulauan Bangka . Sekolah Pasaca Sarjana, Institut Pertanian Bogor. Bogor.

Keanekaragaman dan Kelimpahan Gastropoda di Sungai Kabupaten Gowa. Fakultas Sains dan Teknologi Universitas Islam n Makassar: Makassar.

- Wentworth C.K. 1992. A Scale of Grade and Class Terms for Clastic Sediments. Chicago Journals. Vol. 30 (5): 377-392.
- Wood R.S., dan Olsen D.A. 1983. *Application of Biological Knowledge to the Management of the Virgin Island Conch Fishery. Proc, Gulf Carib. Fish. Inst.* 35: 112
- Www. marinespecies. Org
- Yanti S. 2017. Potensi dan Pola Pemanfaatan Siput Gonggong 'di Perairan Pesisir Desa Pangkil Tanjungkeramat Kecamatan Teluk Bintang Kabupaten Bintang Provinsi Kepulauan Riau. Fakultas Ilmu Kelautan dan Perikanan Universitas Maritim Raja Ali Haji: Tanjungpinang.
- Yudha, G.A., Suryono, C.A. & Santoso, A. 2020. Hubungan antara Jenis Sedimen Pasir dan Kandungan Bahan Organik di Pantai Kartini, Jepara, Jawa Tengah. *Journal of Marine Research*. Vol. 9(4): 423-430.
- Yulisa E.N., Johan Y., dan Hartono d. 2016. Analisis Kesesuaian dan Daya Dukung Ekowisata Pantai Kategori Rekreasi Pantai Laguna Desa Merpas Kabupaten Kaur. *Jurnal Enggano*. Vol. 1(1): 97-111.
- Yunita., Adibrata S., dan Supratman O. 2021. Analisis Kebiasaan Makan Siput Gonggong (*Laevistrombus turturella*) di Bangka Selatan. *Journal of Tropical Marine Science*. Vol. 4(1): 9-17.
- Yusron E. 2010. Keanekaragaman Jenis Ekhinodermata di Perairan Likupang, Minahasa Utara, Sulawesi Utara. *Ilmu Kelautan*. Vol. 15 (2): 85-90.
- Zulkifli D., Triyono H., Suharti R., Jabbar M.A., Bramanna A., Rahayu S.M., Sudiasa., dan Herawati G. 2022. Pengukuran Stok Karbon Ekosistem Lamun di Kawasan Taman Nasional Baluran, Jawa Timur. *Jurnal Kelautan Tropis*. Vol.25(3): 358-368.
- Zurba, N. 2018. Pengenalan Padang Lamun, Suatu Ekosistem yang Terlupakan. Lhokseumawe: Unimal Press





## LAMPIRAN



Lampiran 1. CV (*Curriculum vitae*)

**CURRICULUM VITAE**

**A. Data Pribadi**

- 1. Nama : Maryana Marzuki
- 2. Tempat, Tanggal Lahir : Majene, 24 November 2001
- 3. Alamat : Jl. Sahabat 3, Tamalanrea

**B. Pendidikan**

- 1. SD 43 INP. BT Samang, Majene
- 2. SMP Negeri 3 Majene
- 3. SMA Negeri 3 Majene

Lampiran 2. Data awal pengukuran *Strombus*

Stasiun	Ulangan	Plot	Jenis <i>Strombus</i>				Total Individu
			<i>S. urceus</i>	<i>S. labiatus</i>	<i>S. mutabilis</i>	<i>S. gibberulus gibbosus</i>	
Stasiun 4	1	1	0	0	0	0	0
		2	4	0	0	0	4
		3	1	1	0	0	2
		4	0	3	0	0	3
		5	2	0	0	0	2
	2	1	0	0	0	0	0
		2	0	0	0	0	0
		3	3	0	0	0	3
		4	2	0	0	1	3
		5	2	0	0	2	4
	3	1	0	0	0	0	0
		2	0	0	0	3	3
		3	3	1	0	0	4
		4	1	2	0	1	4
		5	2	0	0	0	2
Stasiun 5	1	1	2	3	0	0	5
		2	0	3	0	1	4
		3	0	2	2	1	5
		4	0	5	0	0	5
		5	4	2	1	0	7
	2	1	0	3	0	0	3
		2	1	4	0	0	5



## Lampiran 2. Lanjutan

Stasiun	Ulangan	Jenis <i>Strombus</i>					Total Individu	
		Plot	<i>S. urceus</i>	<i>S. labiatus</i>	<i>S. mutabilis</i>	<i>S. gibberulus gibbosus</i>		
Stasiun 6	3	3	0	3	0	0	3	
		4	3	0	0	2	5	
		5	2	2	1	0	5	
		1	1	3	0	0	4	
		2	3	1	0	0	4	
		3	2	2	0	0	4	
		4	3	1	0	1	5	
		5	2	2	0	0	4	
		1	3	2	0	0	5	
		2	2	4	3	0	9	
	1	3	3	3	0	1	7	
		4	1	3	1	0	5	
		5	0	3	1	0	4	
		1	1	4	1	0	6	
		2	3	1	0	0	4	
		2	3	4	1	0	0	5
			4	3	1	0	0	4
			5		2	1	0	3
			1	2	2	0	2	6
			2	5	1	0	0	6
3	3	3	1	0	0	4		
	4	3	0	1	2	6		
	5	5	1	1	0	7		

## Lampiran 3. Analisis Kekayaan Jenis Uji Nonparametric Kruskal Wallis

Tests of Normality							
	Stasiun	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Kekayaan_Jenis	Stasiun 4	.385	3	.	.750	3	.000
	Stasiun 5	.385	3	.	.750	3	.000
	Stasiun 6	.385	3	.	.750	3	.000



nce Correction

Lampiran 3. Lanjutan

Descriptives

Kekayaan Jenis

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Stasiun 4	3		
Stasiun 5	3	3.6667	.57735	.33333	2.2324	5.1009	3.00	4.00
Stasiun 6	3	3.6667	.57735	.33333	2.2324	5.1009	3.00	4.00
Total	9	3.2222	.83333	.27778	2.5817	3.8628	2.00	4.00

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Kekayaan_Jenis is the same across categories of Stasiun.	Independent-Samples Kruskal-Wallis Test	.087	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Lampiran 4. Tabel Kekayaan Jenis *Strombus*

Stasiun	Ulangan	Plot	Jumlah Individu	Jumlah Individu Tiap Ulangan (N)	Jumlah Total Jenis Tiap Ulangan (S)	Kekayaan Jenis Tiap Ulangan (D)
		1	0			
		2	4			
		3	2	11	2	0.417
		4	3			
		5	2			
		1	0			
		2	0	10	2	0.434
		3	3			



## Lampiran 4. Lanjutan

Stasiun	Ulangan	Plot	Jumlah Individu	Jumlah Individu Tiap Ulangan (N)	Jumlah Total Jenis Tiap Ulangan (S)	Kekayaan Jenis Tiap Ulangan (D)
Stasiun 5	3	4	3	13	3	0.780
		5	4			
		1	0			
		2	3			
		3	4			
	1	4	4	26	4	0.921
		5	2			
		1	5			
		2	4			
		3	5			
	2	4	7	21	4	0.985
		1	3			
		2	5			
		3	3			
		4	5			
3	5	5	21	3	0.657	
	1	4				
	2	4				
	3	4				
	4	5				
1	5	4	30	4	0.882	
	1	6				
	2	9				
	3	7				
	4	5				
Stasiun 6	2	5	4	22	3	0.647
		1	6			
		2	4			
		3	5			
		4	4			
3	5	3	29	4	0.891	
	1	6				
	2	6				
	3	4				
	4	6				
		5	7			



**Lampiran 5.** Analisis Uji nonparametric Kruskal-Walis Kepadatan Jenis

		ests of Normality					
		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Stasiun	Statistic	df	Sig.	Statistic	df	Sig.
Transform_kepadatan	Stasiun 4	.236	11	.089	.808	11	.012
	Stasiun 5	.242	15	.018	.870	15	.034
	Stasiun 6	.159	15	.200 <sup>*</sup>	.957	15	.638

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Kepadatan is the same across categories of Stasiun.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
Asymptotic significances are displayed. The significance level is .05.				

Each node shows the sample average rank of Stasiun.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Stasiun 5-Stasiun 6	-5.600	4.698	-1.192	.233	.700
Stasiun 4-Stasiun 5	-16.100	4.698	-3.427	.001	.002
Stasiun 4-Stasiun 6	-21.700	4.698	-4.619	.000	.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .05.



Lampiran 6. Tabel Kepadatan *Strombus*

Stasiun	Ulangan	Plot	Jenis <i>Strombus</i>				Kepadatan
			<i>Strombus urceus</i>	<i>Strombus labiatus</i>	<i>Strombus mutabilis</i>	<i>Strombus giberulus gibosus</i>	
Stasiun 4	1	1	0	0	0	0	0
		2	1	0	0	0	1
		3	0.25	0.25	0	0	0.5
		4	0	0.75	0	0	0.75
		5	0.5	0	0	0	0.5
	2	1	0	0	0	0	0
		2	0	0	0	0	0
		3	0.75	0	0	0	0.75
		4	0.5	0	0	0.25	0.75
		5	0.5	0	0	0.5	1
	3	1	0	0	0	0	0
		2	0	0	0	0.75	0.75
		3	0.75	0.25	0	0	1
		4	0.25	0.5	0	0.25	1
		5	0.5	0	0	0	0.5
Stasiun 5	1	1	0.5	0.75	0	0	1.25
		2	0	0.75	0	0.25	1
		3	0	0.5	0.5	0.25	1.25
		4	0	1.25	0	0	1.25
		5	1	0.5	0.25	0	1.75
	2	1	0	0.75	0	0	0.75
		2	0.25	1	0	0	1.25
		3	0	0.75	0	0	0.75
		4	0.75	0	0	0.5	1.25
		5	0.5	0.5	0.25	0	1.25
	3	1	0.25	0.75	0	0	1
		2	0.75	0.25	0	0	1
		3	0.5	0.5	0	0	1
		4	0.75	0.25	0	0.25	1.25
		5	0.5	0.5	0	0	1
1	1	0.75	0.5	0	0	1.25	
	2	0.5	1	0.75	0	2.25	
	3	0.75	0.75	0	0.25	1.75	
	4	0.25	0.75	0.25	0	1.25	
	5	0	0.75	0.25	0	1	
6	1	1	0.25	1	0.25	0	1.5
		2	0.75	0.25	0	0	1
		3	1	0.25	0	0	1.25
		4	0.75	0.25	0	0	1
		5	0	0.5	0.25	0	0.75
	2	1	0.5	0.5	0	0.5	1.5
		2	1.25	0.25	0	0	1.5
		3	0.75	0.25	0	0	1
		4	0.75	0	0.25	0.5	1.5
		5	1.25	0.25	0.25	0	1.75



Lampiran 7. Pola sebaran *Strombus*

Stasiun	Nama Spesies	xi	xi <sup>2</sup>
		0	0
		4	16
		1	1
		0	0
		2	4
		0	0
		0	0
	<i>Strombus urceus</i>	3	9
		2	4
		2	4
		0	0
S4		0	0
		3	9
		1	1
		2	4
	N	15	
	Σx	20	
	Σx <sup>2</sup>	52	
	(Σx) <sup>2</sup>	400	
	Σx <sup>2</sup> -Σx	32	
	(Σx) <sup>2</sup> -Σx	380	
	Σx <sup>2</sup> -Σx / (Σx) <sup>2</sup> -Σx	0,08421	
	<b>Id</b>	1,26316	

Stasiun	Nama Spesies	xi	xi <sup>2</sup>
		0	0
		0	0
		1	1
		3	9
		0	0
		0	0
		0	0
	<i>Strombus gibberulus</i>	0	0
	<i>gibbosus</i>	0	0
		0	0
		0	0
S4		0	0
		1	1
		2	4
		0	0
	N	15	
	Σx	7	
	Σx <sup>2</sup>	15	
	(Σx) <sup>2</sup>	49	
	Σx <sup>2</sup> -Σx	8	
	(Σx) <sup>2</sup> -Σx	42	
	Σx <sup>2</sup> -Σx / (Σx) <sup>2</sup> -Σx	0,19048	
	<b>Id</b>	2,85714	

Stasiun	Nama Spesies	xi	xi <sup>2</sup>
		0	0
		0	0
		1	1
		3	9
		0	0
		0	0
		0	0
	<i>Strombus labiatus</i>	0	0
		0	0
		0	0
		0	0
S4		0	0
		1	1
		2	4
		0	0
	N	15	
	Σx	7	
	Σx <sup>2</sup>	15	
	(Σx) <sup>2</sup>	49	
	Σx <sup>2</sup> -Σx	8	
	(Σx) <sup>2</sup> -Σx	42	
	Σx <sup>2</sup> -Σx / (Σx) <sup>2</sup> -Σx	0,19048	
	<b>Id</b>	2,85714	

Stasiun	Nama Spesies	xi	xi <sup>2</sup>
		2	4
		0	0
		0	0
		0	0
		4	16
		0	0
		1	1
	<i>Strombus urceus</i>	0	0
		3	9
		2	4
		1	4
S5		3	9
		2	4
		3	9
		2	4
	N	15	
	Σx	23	
	Σx <sup>2</sup>	64	
	(Σx) <sup>2</sup>	529	
	Σx <sup>2</sup> -Σx	41	
	(Σx) <sup>2</sup> -Σx	506	
	Σx <sup>2</sup> -Σx / (Σx) <sup>2</sup> -Σx	0,08103	
	<b>Id</b>	1,21542	





Lampiran 7. Lanjutan

Stasiun	Nama Spesies	xi	xi <sup>2</sup>
		3	9
		3	9
		2	4
		5	25
		2	4
		3	9
		4	16
	<i>Strombus labiatus</i>	3	9
		0	0
		2	4
		3	9
S5		1	1
		2	4
		1	1
		2	4
		N	15
		Σx	36
		Σx <sup>2</sup>	108
		(Σx) <sup>2</sup>	1296
		Σx <sup>2</sup> -Σx	72
		(Σx) <sup>2</sup> -Σx	1260
		Σx <sup>2</sup> -Σx / (Σx) <sup>2</sup> -Σx	0,05714
		<b>Id</b>	<b>0,85714</b>

Stasiun	Nama Spesies	xi	xi <sup>2</sup>
		0	0
		1	1
		1	1
		0	0
		0	0
		0	0
		0	0
	<i>Strombus gibberulus gibbosus</i>	0	0
		2	4
		0	0
		0	0
S5		0	0
		0	0
		1	1
		0	0
		N	15
		Σx	5
		Σx <sup>2</sup>	7
		(Σx) <sup>2</sup>	25
		Σx <sup>2</sup> -Σx	2
		(Σx) <sup>2</sup> -Σx	20
		Σx <sup>2</sup> -Σx / (Σx) <sup>2</sup> -Σx	0,1
		<b>Id</b>	<b>1,5</b>

Stasiun	Nama Spesies	xi	xi <sup>2</sup>
		0	0
		0	0
		2	4
		0	0
		1	1
		0	0
		0	0
	<i>Strombus mutabilis</i>	0	0
		0	0
		1	1
		0	0
S5		0	0
		0	0
		0	0
		0	0
		N	15
		Σx	4
		Σx <sup>2</sup>	6
		(Σx) <sup>2</sup>	16
		Σx <sup>2</sup> -Σx	2
		(Σx) <sup>2</sup> -Σx	12
		Σx <sup>2</sup> -Σx / (Σx) <sup>2</sup> -Σx	0,16666
		<b>Id</b>	<b>2,4999</b>

Stasiun	Nama Spesies	xi	xi <sup>2</sup>
		3	9
		2	4
		3	9
		1	1
		0	0
		1	1
		4	16
	<i>Strombus urceus</i>	4	16
		3	9
		0	0
		2	4
S6		5	25
		3	9
		3	9
		5	25
		N	15
		Σx	39
		Σx <sup>2</sup>	137
		(Σx) <sup>2</sup>	1521
		Σx <sup>2</sup> -Σx	98
		(Σx) <sup>2</sup> -Σx	1482
		Σx <sup>2</sup> -Σx / (Σx) <sup>2</sup> -Σx	0,06543
		<b>Id</b>	<b>0,98145</b>



Lampiran 7. Lanjutan

Stasiun	Nama Spesies	$x_i$	$x_i^2$
		2	4
		4	16
		3	9
		3	9
		3	9
		4	16
		1	1
	<i>Strombus labiatus</i>	1	1
		1	1
		2	4
		2	4
S6		1	1
		1	1
		0	0
		1	1
		N	15
		$\Sigma x$	29
		$\Sigma x^2$	77
		$(\Sigma x)^2$	841
		$\Sigma x^2 - \Sigma x$	48
		$(\Sigma x)^2 - \Sigma x$	812
		$\Sigma x^2 - \Sigma x / (\Sigma x)^2 - \Sigma x$	0,05911
		<b>Id</b>	0,8867

asiun	Nama Spesies	$x_i$	$x_i^2$
		0	0
		0	0
		1	1
		0	0
		0	0
		0	0
	<i>Strombus gibberulus gibbosus</i>	0	0
		0	0
		0	0
		0	0
		2	4
		0	0
S6		0	0
		2	4
		0	0
		N	15
		$\Sigma x$	5
		$\Sigma x^2$	9
		$(\Sigma x)^2$	25
		$\Sigma x^2 - \Sigma x$	4
		$(\Sigma x)^2 - \Sigma x$	20
		$\Sigma x^2 - \Sigma x / (\Sigma x)^2 - \Sigma x$	0,2
		<b>Id</b>	3

Stasiun	Nama Spesies	$x_i$	$x_i^2$
		0	0
		3	9
		0	0
		1	1
		1	1
		1	1
		1	1
	<i>Strombus Mutabilis</i>	0	0
		0	0
		0	0
		1	1
		0	0
		0	0
S6		0	0
		0	0
		1	1
		0	0
		N	15
		$\Sigma x$	8
		$\Sigma x^2$	14
		$(\Sigma x)^2$	64
		$\Sigma x^2 - \Sigma x$	6
		$(\Sigma x)^2 - \Sigma x$	56
		$\Sigma x^2 - \Sigma x / (\Sigma x)^2 - \Sigma x$	0,10714
		<b>Id</b>	1,60714



Lampiran 8. Analisis uji Anova Morfmetrik *Strombus*1. *Strombus labiatus*

		Tests of Normality					
Stasiun		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PT	4	.252	7	.198	.930	7	.551
	5	.111	36	.200*	.975	36	.565
	6	.149	31	.079	.945	31	.111
PBC	4	.279	7	.105	.868	7	.177
	5	.170	36	.010	.942	36	.061
	6	.188	31	.007	.943	31	.101
LBC	4	.296	7	.063	.840	7	.099
	5	.170	36	.010	.944	36	.068
	6	.180	31	.012	.935	31	.059
LC	4	.296	7	.063	.840	7	.099
	5	.170	36	.010	.947	36	.083
	6	.195	31	.004	.932	31	.050
SPIRE	4	.357	7	.007	.835	7	.089
	5	.150	36	.039	.960	36	.215
	6	.155	31	.055	.946	31	.124

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

## Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
PT	4	7	3.2286	.26904	.10169	2.9798	3.4774	2.80	3.70
	5	36	3.2389	.28961	.04827	3.1409	3.3369	2.45	3.80
	6	31	3.3694	.38572	.06928	3.2279	3.5108	2.50	4.00
	Total	74	3.2926	.33410	.03884	3.2152	3.3700	2.45	4.00
	4	7	2.2000	.18257	.06901	2.0311	2.3689	1.90	2.40
	5	36	2.2986	.18185	.03031	2.2371	2.3601	1.75	2.60
	6	31	2.2226	.25685	.04613	2.1284	2.3168	1.70	2.85
Total	74	2.2574	.21766	.02530	2.2070	2.3079	1.70	2.85	
LBC	4	7	.6857	.06901	.02608	.6219	.7495	.55	.75
	5	36	.7222	.10983	.01831	.6851	.7594	.45	.90
	6	31	.6790	.08829	.01586	.6466	.7114	.50	.85
	Total	74	.7007	.09914	.01152	.6777	.7236	.45	.90
LC	4	7	1.2857	.06901	.02608	1.2219	1.3495	1.20	1.40
	5	36	1.3278	.16451	.02742	1.2721	1.3834	.90	1.70
	6	31	1.3726	.13281	.02385	1.3239	1.4213	1.00	1.60
	Total	74	1.3426	.14634	.01701	1.3087	1.3765	.90	1.70
SPIRE	4	7	1.0000	.15275	.05774	.8587	1.1413	.80	1.30
	36	1.0042	.14799	.02467	.9541	1.0543	.70	1.35	
	31	1.0935	.14534	.02610	1.0402	1.1469	.85	1.40	
	74	1.0412	.15199	.01767	1.0060	1.0764	.70	1.40	



Lampiran 8. Lanjutan

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
PT	2.006	2	71	.142
PBC	1.806	2	71	.172
LBC	1.425	2	71	.247
LC	2.576	2	71	.083
SPIRE	.385	2	71	.682

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
PT	Between Groups	.315	2	.158	1.428	.246
	Within Groups	7.833	71	.110		
	Total	8.148	73			
PBC	Between Groups	.122	2	.061	1.296	.280
	Within Groups	3.337	71	.047		
	Total	3.458	73			
LBC	Between Groups	.033	2	.016	1.701	.190
	Within Groups	.685	71	.010		
	Total	.717	73			
LC	Between Groups	.058	2	.029	1.378	.259
	Within Groups	1.505	71	.021		
	Total	1.563	73			
SPIRE	Between Groups	.146	2	.073	3.368	.040
	Within Groups	1.540	71	.022		
	Total	1.686	73			

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Stasiun	(J) Stasiun	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
PT	4	5	-.01032	.13721	.997	-.3388	.3181	
		6	-.14078	.13900	.571	-.4735	.1920	
	5	4	.01032	.13721	.997	-.3181	.3388	
		6	-.13047	.08139	.251	-.3253	.0644	
	6	4	.14078	.13900	.571	-.1920	.4735	
		5	.13047	.08139	.251	-.0644	.3253	
	PBC	5	5	-.09861	.08955	.517	-.3130	.1158
			6	-.02258	.09072	.966	-.2397	.1946
		4	5	.09861	.08955	.517	-.1158	.3130
			6	.07603	.05312	.330	-.0511	.2032
		4	5	.02258	.09072	.966	-.1946	.2397
			6	-.07603	.05312	.330	-.2032	.0511



Optimization Software:  
www.balesio.com

Lampiran 8. Lanjutan

Dependent Variable	(I) Stasiun	(J) Stasiun	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LBC	4	5	-.03651	.04056	.642	-.1336	.0606
		6	.00668	.04109	.986	-.0917	.1051
	5	4	.03651	.04056	.642	-.0606	.1336
		6	.04319	.02406	.179	-.0144	.1008
	6	4	-.00668	.04109	.986	-.1051	.0917
		5	-.04319	.02406	.179	-.1008	.0144
LC	4	5	-.04206	.06014	.765	-.1860	.1019
		6	-.08687	.06093	.333	-.2327	.0590
	5	4	.04206	.06014	.765	-.1019	.1860
		6	-.04480	.03567	.425	-.1302	.0406
	6	4	.08687	.06093	.333	-.0590	.2327
		5	.04480	.03567	.425	-.0406	.1302
SPIRE	4	5	-.00419	.06084	.997	-.1498	.1415
		6	-.09355	.06164	.289	-.2411	.0540
	5	4	.00419	.06084	.997	-.1415	.1498
		6	-.08935*	.03609	.041	-.1757	-.0030
	6	4	.09355	.06164	.289	-.0540	.2411
		5	.08935*	.03609	.041	.0030	.1757

\*. The mean difference is significant at the 0.05 level.

Homogenous substance

PT

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05	
		1	
4	7	3.2286	
5	36	3.2389	
6	31	3.3694	
Sig.		.485	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 11.786



**Lampiran 8. Lanjutan**

**PBC**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05
		1
4	7	2.2000
6	31	2.2226
5	36	2.2986
Sig.		.436

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 14.786.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**LBC**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05
		1
6	31	.6790
4	7	.6857
5	36	.7222
Sig.		.460

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 14.786.

**LC**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05
		1
		1.2857
		1.3278
		1.3726
		.243



## Lampiran 8. Lanjutan

## SPIRE

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for
		alpha = 0.05
		1
4	7	1.0000
5	36	1.0042
6	31	1.0935
Sig.		.202

Means for groups in homogeneous subsets are displayed.

2. *Strombus urceus*

Stasiun		Tests of Normality					
		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PT	4	.104	20	.200*	.975	20	.848
	5	.133	23	.200*	.977	23	.855
	6	.127	39	.112	.960	39	.175
PBC	4	.111	20	.200*	.984	20	.974
	5	.121	23	.200*	.972	23	.728
	6	.159	39	.014	.944	39	.052
LBC	4	.210	20	.021	.922	20	.106
	5	.145	23	.200*	.954	23	.351
	6	.202	39	.000	.943	39	.047
LC	4	.135	20	.200*	.967	20	.687
	5	.141	23	.200*	.959	23	.440
	6	.165	39	.009	.951	39	.087
SPIRE	4	.138	20	.200*	.924	20	.116
	5	.185	23	.039	.918	23	.061
	6	.146	39	.036	.947	39	.067
TRANSFORM_LBC	4	.197	20	.041	.928	20	.143
	5	.155	23	.161	.949	23	.280
	6	.194	39	.001	.946	39	.059

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction



Lampiran 8. Lanjutan

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
PT	4	20	3.5450	.45708	.10221	3.3311	3.7589	2.80	4.50
	5	23	3.7804	.43608	.09093	3.5919	3.9690	3.00	4.80
	6	39	3.7513	.34326	.05497	3.6400	3.8626	3.20	4.60
	Total	82	3.7091	.40606	.04484	3.6199	3.7984	2.80	4.80
PBC	4	20	2.5650	.35729	.07989	2.3978	2.7322	1.90	3.30
	5	23	2.7217	.27379	.05709	2.6033	2.8401	2.10	3.20
	6	39	2.5603	.24978	.04000	2.4793	2.6412	2.00	3.30
	Total	82	2.6067	.29120	.03216	2.5427	2.6707	1.90	3.30
LBC	4	20	.7200	.13219	.02956	.6581	.7819	.50	1.00
	5	23	.7413	.09612	.02004	.6997	.7829	.55	.90
	6	39	.7474	.11236	.01799	.7110	.7839	.55	1.00
	Total	82	.7390	.11250	.01242	.7143	.7637	.50	1.00
LC	4	20	1.4450	.18771	.04197	1.3571	1.5329	1.00	1.80
	5	23	1.4957	.15294	.03189	1.4295	1.5618	1.20	1.80
	6	39	1.5179	.14486	.02320	1.4710	1.5649	1.20	1.80
	Total	82	1.4939	.15916	.01758	1.4589	1.5289	1.00	1.80
SPIRE	4	20	.9850	.15652	.03500	.9117	1.0583	.70	1.20
	5	23	1.1239	.15874	.03310	1.0553	1.1926	.90	1.50
	6	39	1.1346	.16825	.02694	1.0801	1.1892	.80	1.40
	Total	82	1.0951	.17278	.01908	1.0572	1.1331	.70	1.50
TRANSF	4	20	.2343	.03296	.00737	.2189	.2498	.18	.30
ORM_LB	5	23	.2402	.02421	.00505	.2298	.2507	.19	.28
C	6	39	.2415	.02777	.00445	.2325	.2505	.19	.30
Total	82	.2394	.02801	.00309	.2333	.2456	.18	.30	





## Lampiran 8. Lanjutan

## Test of Homogeneity of Variances


	Levene Statistic	df1	df2	Sig.
PT	1.533	2	79	.222
PBC	1.391	2	79	.255
LBC	1.310	2	79	.276
LC	.711	2	79	.494
SPIRE	.302	2	79	.740
TRANSFORM_LBC	1.161	2	79	.319

## ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
PT	Between Groups	.725	2	.363	2.267	.110
	Within Groups	12.631	79	.160		
	Total	13.356	81			
PBC	Between Groups	.423	2	.212	2.594	.081
	Within Groups	6.446	79	.082		
	Total	6.869	81			
LBC	Between Groups	.010	2	.005	.394	.676
	Within Groups	1.015	79	.013		
	Total	1.025	81			
LC	Between Groups	.070	2	.035	1.404	.252
	Within Groups	1.982	79	.025		
	Total	2.052	81			
SPIRE	Between Groups	.322	2	.161	6.077	.004
	Within Groups	2.096	79	.027		
	Total	2.418	81			
TRANSFORM_LBC	Between Groups	.001	2	.000	.445	.643
	Within Groups	.063	79	.001		
	Total	.064	81			

## Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Stasiun	(J) Stasiun	Mean Differenc e (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
	5	6	-.23543	.12225	.138	-.5275	.0566
	6	4	-.20628	.10997	.152	-.4690	.0564
	4	5	.23543	.12225	.138	-.0566	.5275

Lampiran 8. Lanjutan

Dependent Variable	(I) Stasiun	(J) Stasiun	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PBC	6	6	.02915	.10512	.959	-.2220	.2803
		4	.20628	.10997	.152	-.0564	.4690
		5	-.02915	.10512	.959	-.2803	.2220
	4	5	-.15674	.08733	.178	-.3653	.0519
		6	.00474	.07856	.998	-.1829	.1924
		5	.15674	.08733	.178	-.0519	.3653
LBC	6	4	.16148	.07510	.086	-.0179	.3409
		5	-.00474	.07856	.998	-.1924	.1829
		5	-.16148	.07510	.086	-.3409	.0179
	4	5	-.02130	.03466	.813	-.1041	.0615
		6	-.02744	.03117	.654	-.1019	.0470
		5	.02130	.03466	.813	-.0615	.1041
LC	6	4	-.00613	.02980	.977	-.0773	.0651
		5	.02744	.03117	.654	-.0470	.1019
		5	.00613	.02980	.977	-.0651	.0773
	4	5	-.05065	.04842	.550	-.1663	.0650
		6	-.07295	.04356	.221	-.1770	.0311
		5	.05065	.04842	.550	-.0650	.1663
SPIRE	6	6	-.02230	.04164	.854	-.1218	.0772
		4	.07295	.04356	.221	-.0311	.1770
		5	.02230	.04164	.854	-.0772	.1218
	4	5	-.13891*	.04980	.018	-.2579	-.0200
		6	-.14962*	.04479	.004	-.2566	-.0426
		5	.13891*	.04980	.018	.0200	.2579
TRANSFOR M_LBC	6	4	-.01070	.04282	.966	-.1130	.0916
		5	.14962*	.04479	.004	.0426	.2566
		5	.01070	.04282	.966	-.0916	.1130
	4	5	-.00590	.00862	.773	-.0265	.0147
		6	-.00720	.00776	.624	-.0257	.0113
		5	.00590	.00862	.773	-.0147	.0265
6	6	-.00130	.00741	.983	-.0190	.0164	
	4	.00720	.00776	.624	-.0113	.0257	
	5	.00130	.00741	.983	-.0164	.0190	

\*. The mean difference is significant at the 0.05 level.

PT

Tukey USDab



Optimization Software:  
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Subset for alpha = 0.05	
1	
	3.5450
	3.7513
	3.7804
	.099

## Lampiran 8. Lanjutan

**PBC**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05	
		1	
6	39	2.5603	
4	20	2.5650	
5	23	2.7217	
Sig.			.117

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 25.185.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**LBC**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05	
		1	
4	20	.7200	
5	23	.7413	
6	39	.7474	
Sig.			.668

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 25.185.

**LC**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05	
		1	
4	20	1.4450	
5	23	1.4957	
6	39	1.5179	
Sig.			.237

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 25.185.



Lampiran 8. Lanjutan

**SPIRE**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05	
		1	2
4	20	.9850	
5	23		1.1239
6	39		1.1346
Sig.		1.000	.970

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 25.185.

3. *Strombus mutabilis*

**Tests of Normality**

Stasiun	Statistic	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		df	Sig.	Statistic	df	Sig.	
PT	5	.171	4	.	.994	4	.976
	6	.209	9	.200*	.857	9	.089
PBC	5	.152	4	.	.997	4	.989
	6	.212	9	.200*	.909	9	.311
LBC	5	.250	4	.	.945	4	.683
	6	.205	9	.200*	.884	9	.172
LC	5	.303	4	.	.791	4	.086
	6	.226	9	.200*	.884	9	.172
SPIRE	5	.192	4	.	.971	4	.850
	6	.204	9	.200*	.940	9	.586

\*. This is a lower bound of the true significance.

**Descriptives**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
PT	5	4	2.5625	.18875	.09437	2.2622	2.8628	2.35	2.80
	6	9	2.4667	.16202	.05401	2.3421	2.5912	2.30	2.70
	Total	13	2.4962	.16890	.04684	2.3941	2.5982	2.30	2.80
PBC	5	4	2.0875	.25290	.12645	1.6851	2.4899	1.80	2.40
	6	9	1.7611	.33891	.11297	1.5006	2.0216	1.15	2.20
	Total	13	1.8615	.34227	.09493	1.6547	2.0684	1.15	2.40
LBC	5	4	.6000	.04082	.02041	.5350	.6650	.55	.65
	6	9	.5833	.08660	.02887	.5168	.6499	.50	.75
	13	13	.5885	.07403	.02053	.5437	.6332	.50	.75
	4	4	1.1625	.09465	.04732	1.0119	1.3131	1.10	1.30
	9	9	1.1167	.11180	.03727	1.0307	1.2026	1.00	1.30
	13	13	1.1308	.10516	.02916	1.0672	1.1943	1.00	1.30
	4	4	.6125	.08539	.04270	.4766	.7484	.50	.70
	9	9	.5778	.12019	.04006	.4854	.6702	.40	.80
	13	13	.5885	.10831	.03004	.5230	.6539	.40	.80



Optimization Software:  
[www.balesio.com](http://www.balesio.com)

## Lampiran 8. Lanjutan

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
PT	.007	1	11	.937
PBC	.316	1	11	.585
LBC	3.497	1	11	.088
LC	.335	1	11	.574
SPIRE	.543	1	11	.476

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
PT	Between Groups	.025	1	.025	.883	.368
	Within Groups	.317	11	.029		
	Total	.342	12			
PBC	Between Groups	.295	1	.295	2.921	.115
	Within Groups	1.111	11	.101		
	Total	1.406	12			
LBC	Between Groups	.001	1	.001	.130	.725
	Within Groups	.065	11	.006		
	Total	.066	12			
LC	Between Groups	.006	1	.006	.504	.492
	Within Groups	.127	11	.012		
	Total	.133	12			
SPIRE	Between Groups	.003	1	.003	.267	.615
	Within Groups	.137	11	.012		
	Total	.141	12			

4. *Strombus gibberulus gibbosus*

		Tests of Normality					
Stasiun		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PT	4	.185	7	.200 <sup>+</sup>	.967	7	.877
	5	.269	4	.	.844	4	.207
	6	.208	3	.	.992	3	.826
PBC	4	.176	7	.200 <sup>+</sup>	.871	7	.189
	5	.170	4	.	.988	4	.948
	6	.304	3	.	.907	3	.407
LBC	4	.286	7	.086	.821	7	.066
		.218	4	.	.920	4	.538
		.253	3	.	.964	3	.637
		.245	7	.200 <sup>+</sup>	.888	7	.263
		.329	4	.	.895	4	.406
		.328	3	.	.871	3	.298
		.181	7	.200 <sup>+</sup>	.951	7	.739
		.171	4	.	.994	4	.976
		.175	3	.	1.000	3	1.000



Lampiran 8. Lanjutan

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
PT	4	7	3.5714	.16036	.06061	3.4231	3.7197	3.30	3.80
	5	4	3.7000	.40825	.20412	3.0504	4.3496	3.30	4.10
	6	3	2.7500	.47697	.27538	1.5651	3.9349	2.30	3.25
	Total	14	3.4321	.47459	.12684	3.1581	3.7062	2.30	4.10
PBC	4	7	2.7571	.21492	.08123	2.5584	2.9559	2.50	3.00
	5	4	2.6625	.36827	.18414	2.0765	3.2485	2.25	3.10
	6	3	2.3667	.47258	.27285	1.1927	3.5406	2.00	2.90
	Total	14	2.6464	.33424	.08933	2.4534	2.8394	2.00	3.10
LBC	4	7	.7286	.16036	.06061	.5803	.8769	.40	.90
	5	4	.7875	.15478	.07739	.5412	1.0338	.65	1.00
	6	3	.6167	.07638	.04410	.4269	.8064	.55	.70
	Total	14	.7214	.14899	.03982	.6354	.8075	.40	1.00
LC	4	7	1.5571	.12724	.04809	1.4395	1.6748	1.40	1.80
	5	4	1.7125	.06292	.03146	1.6124	1.8126	1.65	1.80
	6	3	1.4333	.16073	.09280	1.0341	1.8326	1.25	1.55
	Total	14	1.5750	.15159	.04052	1.4875	1.6625	1.25	1.80
SPIRE	4	7	.8857	.16762	.06335	.7307	1.0407	.60	1.10
	5	4	.9625	.18875	.09437	.6622	1.2628	.75	1.20
	6	3	.7000	.30000	.17321	-.0452	1.4452	.40	1.00
	Total	14	.8679	.21087	.05636	.7461	.9896	.40	1.20

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
PT	5.178	2	11	.026
PBC	2.079	2	11	.172
LBC	.430	2	11	.661
LC	1.361	2	11	.296
SPIRE	.418	2	11	.669



Lampiran 8. Lanjutan

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
PT	Between Groups	1.819	2	.909	9.018	.005
	Within Groups	1.109	11	.101		
	Total	2.928	13			
PBC	Between Groups	.322	2	.161	1.565	.252
	Within Groups	1.131	11	.103		
	Total	1.452	13			
LBC	Between Groups	.051	2	.025	1.174	.345
	Within Groups	.238	11	.022		
	Total	.289	13			
LC	Between Groups	.138	2	.069	4.726	.033
	Within Groups	.161	11	.015		
	Total	.299	13			
SPIRE	Between Groups	.123	2	.061	1.480	.270
	Within Groups	.455	11	.041		
	Total	.578	13			

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Stasiun	(J) Stasiun	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PT	4	5	-.12857	.19904	.798	-.6662	.4090
		6	.82143*	.21914	.008	.2296	1.4133
	5	4	.12857	.19904	.798	-.4090	.6662
		6	.95000*	.24254	.006	.2949	1.6051
	6	4	-.82143*	.21914	.008	-1.4133	-.2296
		5	-.95000*	.24254	.006	-1.6051	-.2949
PBC	4	5	.09464	.20095	.886	-.4481	.6374
		6	.39048	.22124	.226	-.2071	.9880
	5	4	-.09464	.20095	.886	-.6374	.4481
		6	.29583	.24487	.473	-.3655	.9572
	6	4	-.39048	.22124	.226	-.9880	.2071
		5	-.29583	.24487	.473	-.9572	.3655
LBC	4	5	-.05893	.09216	.802	-.3078	.1900
		6	.11190	.10147	.532	-.1621	.3860
	5	4	.05893	.09216	.802	-.1900	.3078
		6	.17083	.11230	.319	-.1325	.4741
	6	4	-.11190	.10147	.532	-.3860	.1621
		5	-.17083	.11230	.319	-.4741	.1325
SPIRE	4	5	-.15536	.07575	.146	-.3600	.0492
		6	.12381	.08340	.335	-.1014	.3491
	5	4	.15536	.07575	.146	-.0492	.3600
		6	.27917*	.09231	.029	.0299	.5285



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Lampiran 8. Lanjutan

Dependent Variable	(I) Stasiun	(J) Stasiun	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
SPIRE	6	4	-.12381	.08340	.335	-.3491	.1014
		5	-.27917*	.09231	.029	-.5285	-.0299
	4	5	-.07679	.12754	.822	-.4212	.2677
		6	.18571	.14041	.412	-.1935	.5650
	5	4	.07679	.12754	.822	-.2677	.4212
		6	.26250	.15541	.252	-.1572	.6822
	6	4	-.18571	.14041	.412	-.5650	.1935
		5	-.26250	.15541	.252	-.6822	.1572

\*. The mean difference is significant at the 0.05 level.

**PT**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05	
		1	2
6	3	2.7500	
4	7		3.5714
5	4		3.7000
Sig.		1.000	.832

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.131.

**BC**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05	
		1	
6	3	2.3667	
5	4	2.6625	
4	7	2.7571	
Sig.		.231	

**LBC**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05	
		1	
		.6167	
		.7286	
		.7875	
		.259	

homogeneous

n Sample Size =





**Lampiran 8.** Lanjutan

**LC**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for alpha = 0.05	
		1	2
6	3	1.4333	
4	7	1.5571	1.5571
5	4		1.7125
Sig.		.341	.200

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.131.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**SPIRE**

Tukey HSD<sup>a,b</sup>

Stasiun	N	Subset for
		alpha = 0.05
6	3	.7000
4	7	.8857
5	4	.9625
Sig.		.198

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.131.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

**Lampiran 9.** Tabel distribusi morfometrik *Strombus*

1. Panjang total

Interval	<i>S. labiatus</i>	<i>S. uceus</i>	<i>S. mutabilis</i>	<i>S. gibberulus gibbosus</i>
2.3 - 2.59	2	0	8	1
2.6 - 2.89	5	1	5	1
2.9 - 3.19	19	6	0	0
3.2 - 3.49	24	14	0	4
3.5 - 3.79	18	25	0	5
3.8 - 4.09	6	23	0	2
4.1 - 4.39	0	7	0	1
4.4 - 4.69	0	5	0	0
4.7 - 4.99	0	1	0	0
	74	82	13	14



**Lampiran 9. Lanjutan**

2. Panjang bukaan cangkang

Interval			<i>S. labiatus</i>	<i>S. uceus</i>	<i>S. mutabilis</i>	<i>S. gibberulus gibbosus</i>
1.15	-	1.44	0	0	2	0
1.45	-	1.74	0	0	1	0
1.75	-	2.04	1	2	7	1
2.05	-	2.34	13	12	2	2
2.35	-	2.64	38	33	1	3
2.65	-	2.94	19	24	0	5
2.95	-	3.24	3	9	0	3
3.25	-	3.54	0	2	0	0
3.55	-	3.84	0	0	0	0
Total			74	82	13	14

3. Lebar bukaan cangkang

Interval			<i>S.labiatus</i>	<i>S. urceus</i>	<i>S. mutabilis</i>	<i>S. gibberulus gibbosus</i>
0.4	-	0.69	25	21	12	4
0.7	-	0.99	49	59	1	9
1	-	1.29	0	2	0	1
1.3	-	1.59	0	0	0	0
1.6	-	1.89	0	0	0	0
1.9	-	2.19	0	0	0	0
2.2	-	2.49	0	0	0	0
2.5	-	2.79	0	0	0	0
2.8	-	3.09	0	0	0	0
Total			74	82	13	14

4. Lebar cangkang

Interval			<i>S. labiatus</i>	<i>S. uceus</i>	<i>S. mutabilis</i>	<i>S. gibberulus gibbosus</i>
0.9	-	1.09	3	1	3	0
1.1	-	1.29	14	3	8	1
1.3	-	1.49	42	29	2	1
1.5	-	1.69	14	36	0	8
1.7	-	1.89	1	13	0	4
1.9	-	2.09	0	0	0	0
2.1	-	2.29	0	0	0	0
		49	0	0	0	0
		69	0	0	0	0
Total			74	82	13	14



## Lampiran 9. Lanjutan

5. Panjang *spire*

Interval		<i>S. labiatus</i>	<i>S. uceus</i>	<i>S. mutabilis</i>	<i>S. gibberulus gibbosus</i>	
0.4	-	0.79	1	1	12	4
0.8	-	1.19	55	51	1	9
1.2	-	1.59	18	30	0	1
1.6	-	1.99	0	0	0	0
2	-	2.39	0	0	0	0
2.4	-	2.79	0	0	0	0
2.8	-	3.19	0	0	0	0
3.2	-	3.59	0	0	0	0
3.6	-	3.99	0	0	0	0
Total			74	82	13	14

## Lampiran 10. Tabel Parameter Lingkungan

Stasiun	Ulangan	Suhu	Salinitas	pH	Kecepatan Arus	BOT Sedimen	
						%BOT	Kategori
S1	1	31	28	7,04	0,098	1,23	sangat rendah
	2	31	28	7,03	0,096	1,44	sangat rendah
	3	32	29	7,04	0,099	0,74	sangat rendah
S2	1	32	28	7,09	0,095	1,53	Sangat rendah
	2	32	29	7,09	0,097	3,31	sangat rendah
	3	32	29	7,07	0,099	0,80	sangat rendah
S3	1	31	29	7,07	0,092	1,37	sangat rendah
	2	32	29	7,07	0,093	1,24	sangat rendah
	3	31	29	7,07	0,092	1,37	sangat rendah
S4	1	31	31	7,9	0,138	13,52	Sedang
	2	30	37	8	0,129	16,44	sedang
	3	31	31	8,02	0,133	7,50	sedang
S5	1	30	32	8,09	0,12	7,52	sedang
	2	30	31	8,06	0,107	16,75	sedang
	3	29	32	8,09	0,106	13,36	sedang
S6	1	29	33	8,03	0,138	11,87	sedang
	2	28	33	8,02	0,126	16,40	sedang
			33	8,04	0,149	9,66	sedang



## Lampiran 11. Analisis Butir Sedimen

Klasifikasi	Diameter Partikel(mm)	Berat Sedimen Tertahan Pada Tiap Ulangan(gr)								
		S1.1	S1.2	S1.3	S2.1	S2.2	S2.3	S3.1	S3.2	S3.3
Kerikil	2	0,362	0,393	0,566	0,236	0,474	0,208	0,173	0,523	0,854
	1	0,582	0,246	0,322	0,665	0,307	0,321	0,531	0,381	0,225
Pasir	0,5	0,447	0,562	0,832	0,366	0,518	0,456	0,25	0,541	0,359
	0,25	4,752	4,752	23,075	3,801	1,66	1,026	1,283	5,009	3,068
	0,125	85,401	85,401	70,075	88,401	87,461	89,336	89,52	85,085	87,998
lumpur	0,063	7,604	7,604	4,114	6,449	9,691	5,884	8,225	8,361	5,101
	0,0039	0,481	0,481	1,174	0,16	0,175	2,892	0,172	0,065	3,134
Berat awal(gr)		100,103	100,103	100,217	100,231	100,344	100,594	100,499	100,282	100,834

Klasifikasi	Diameter Partikel(mm)	Berat Sedimen Tertahan Pada Tiap Ulangan(gr)								
		S4.1	S4.2	S4.3	S5.1	S5.2	S5.3	S6.1	S6.2	S6.3
Kerikil	2	0,585	0,574	0,598	0,426	0,475	0,444	0,431	0,458	0,439
	1	3,974	2,996	3,544	2,696	3,041	2,515	2,648	3,501	2,842
Pasir	0,5	18,77	17,879	18,386	5,142	5,267	4,569	4,446	4,274	4,894
	0,25	28,915	28,727	27,997	6,832	7,013	6,912	7,226	5,473	5,673
	0,125	11,221	11,721	10,989	8,503	7,201	7,691	5,618	6,429	5,472
lumpur	0,063	15,587	17,922	16,882	23,046	22,988	23,496	25,672	25,634	27,976
	0,0039	19,946	19,621	20,643	53,378	53,121	53,997	54,148	54,263	52,264
Berat awal(gr)		100,059	100,301	100,396	100,725	100,101	100,611	100,651	100,143	100,514

Stasiun	Kerikil	Pasir	Lumpur
1	0,45%	92,02%	7,14%
2	0,30%	91,08%	8,38%
3	0,51%	90,93%	8,31%
4	17,30%	45,97%	36%
5	11,87%	35,44%	52%
6	13,93%	39,61%	46%



## Lampiran 12. Hasil Uji t Perbandingan Parameter Lingkungan di Stasiun A dengan B

Group Statistics					
	Stasiun	N	Mean	Std. Deviation	Std. Error Mean
Suhu	Stasiun A	9	31.5556	.52705	.17568
	Stasiun B	9	29.5556	1.13039	.37680

Independent Samples Test										
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
Suhu	Equal variances assumed	6.113	.025	4.811	16	.000	2.00000	.41574	1.11867	2.88133
	Equal variances not assumed			4.811	11.321	.001	2.00000	.41574	1.08812	2.91188

Group Statistics					
	Stasiun	N	Mean	Std. Deviation	Std. Error Mean
Salinitas	Stasiun A	9	28.6667	.50000	.16667
	Stasiun B	9	32.5556	1.87824	.62608

Independent Samples Test										
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
Salinitas	Equal variances assumed	3.729	.071	-6.002	16	.000	-3.88889	.64788	-5.26234	-2.51544
	Equal variances not assumed			-6.002	9.128	.000	-3.88889	.64788	-5.35137	-2.42641

Group Statistics					
	Stasiun	N	Mean	Std. Deviation	Std. Error Mean
pH	Stasiun A	9	7.0633	.02179	.00726
	Stasiun B	9	8.0278	.05718	.01906

Independent Samples Test										
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
pH	Equal variances assumed	.094	.167	-47.283	16	.000	-.96444	.02040	-1.00768	-.92120
	Equal variances not assumed			-47.283	10.277	.000	-.96444	.02040	-1.00973	-.91916



Group Statistics					
	Stasiun	N	Mean	Std. Deviation	Std. Error Mean
pH	Stasiun A	9	.0957	.00283	.00094
	Stasiun B	9	.1273	.01439	.00480

Lampiran 12. Lanjutan

Independent Samples Test											
Levene's Test for Equality of Variances				t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
									Lower	Upper	
Kecepatan Arus	Equal variances assumed	10.294	.005	-6.479	16	.000	-.03167	.00489	-.04203	-.02131	
	Equal variances not assumed			-6.479	8.617	.000	-.03167	.00489	-.04280	-.02053	

Group Statistics					
	Stasiun	N	Mean	Std. Deviation	Std. Error Mean
TeksturButirSedimen	Stasiun A	9	.1524	.01085	.00362
	Stasiun B	9	.4897	.08207	.02736

Independent Samples Test											
Levene's Test for Equality of Variances				t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
									Lower	Upper	
Tekstur Butir Sedimen	Equal variances assumed	9.497	.007	-12.224	16	.000	-.33732	.02760	-.39582	-.27882	
	Equal variances not assumed			-12.224	8.280	.000	-.33732	.02760	-.40059	-.27406	

Group Statistics					
	Stasiun	N	Mean	Std. Deviation	Std. Error Mean
BOTSedimen	Stasiun A	9	1.4477	.75051	.25017
	Stasiun B	9	12.5571	3.68832	1.22944

Independent Samples Test											
Levene's Test for Equality of Variances				t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
									Lower	Upper	
BOT Sedimen	Equal variances assumed	17.196	.001	-8.855	16	.000	-11.10944	1.25463	-13.76915	-8.44974	
	Equal variances not assumed			-8.855	8.661	.000	-11.10944	1.25463	-13.96463	-8.25426	

