

## DAFTAR PUSTAKA

- Ali, S. A., Nessa, N., Djawad, I., & Omar, S. B. A. 2005. *Analisis Struktur Populasi Ikan Terbang (Hirundichthys oxycephalus, Bleeker 1852) laut Flores dan Selat Makassar*.
- Andy Omar, S. Bin. 2013. *Biologi Perikanan. Fakultas Ilmu Kelautan dan Perikanan. Universitas Hasanuddin. Makassar*.
- Apriani, Y. D., Rahmawati, N., Astriana, W., Mersi, Marki, & Fatiqin, A. 2021. Analisis Morfometrik dan Meristik Ikan Genus *Oreochromis sp.* *Prosiding Seminar Nasional Biotik*, 1, 412–422. <https://semnas.biologi.fmipa.unp.ac.id/index.php/prosiding/article/view/56%0Ahttps://semnas.biologi.fmipa.unp.ac.id/index.php/prosiding/article/download/56/46>
- Arifin, M. Y. 2016. Pertumbuhan dan Survival Rate Ikan Nila (*Oreochromis sp.*) Stain Merah dan Strain Hitam yang dipelihara pada Media Bersalinitas. *Jurnal Ilmiah*, 16(1), 159–166. <https://media.neliti.com>.
- Arifin, O. Z., & Kurniasih, T. 2007. Karakterisasi Morfologi Keturunan Pertama Ikan Nila (*Oreochromis niloticus*) Get dan Gift berdasarkan Metode Truss Morphometrics. *J. Ris. Akuakultur*, 2(3), 373–383.
- Ariyanto, D. 2002. Analisis Keragaman Bentuk Tubuh Ikan Nila Strain Gift pada Tiga Tingkatan Umur Yang Berbeda. *Jurnal Perikanan Universitas Gadjah Mada*, 4(1), 19–26. <https://doi.org/10.22146/jfs.8871>
- Ariyanto, D., Listiyowati, N., & Imron, I. 2011. Analisis Truss Morfometrik Beberapa Varietas (*Oreochromis niloticus*). *Jurnal Riset Akuakultur*, 6(2), 187–196. <https://doi.org/10.15578/jra.6.2.2011.187-196>
- Ayu, N. D., & Hastuti, S. 2012. Analisa Genetic Gain Anakan Ikan Nila Pandu (*Oreochromis niloticus*) F5 Hasil Pembesaran I. *Journal of Aquaculture Management and Technology*, 1(1), 147–160.
- Barriga-Sosa, I. D. L. A., Jiménez-Badillo, M. D. L., Ibáñez, A. L., & Arredondo-Figueroa, J. L. 2004. Variability of Tilapias (*Oreochromis spp.*) Introduced in Mexico: Morphometric, Meristic and Genetic Characters. *Journal of Applied Ichthyology*, 20(1), 7–14. <https://doi.org/10.1111/j.1439-0426.2004.00445.x>
- Baur, H., & Leuenberger, C. 2011. Analysis of Ratios in Multivariate Morphometry. *Systematic Biology*, 60(6), 813–825. <https://doi.org/10.1093/sysbio/syr061>
- Brito, R. 2014. *Ficha técnica tilapia Oreochromis niloticus* (Issue March).
- Cholik, F., Artati & Arifudin R. 1986. *Pengelolaan Kualitas Air Kolam. INFIS Manual seri nomor 26. Dirjen Perikanan. Jakarta. 52 Halaman*.
- Dailami, M., Rahmawati, A., Saleky, D., & Toha, A.H.A. 2021. *Ikan Nila. Brainy Bee: Malang. 128 Halaman*.
- Daniels, S. R., Stewart, B. A., Ridgway, T. M., & Florence, W. 2001. Carapace Dentition Patterns, Morphometrics and Allozyme Differentiation Amongst Two Toothed Freshwater Crab Species (*Potamonautes warreni* and *p. unispinus*) (Decapoda:

- Brachyura: Potamonautidae) from river systems in South Africa. *Journal of Zoology*, 255(3), 389–404. <https://doi.org/10.1017/S0952836901001480>
- Desrita, Muhtadi, A., Tamba, I. S., & Ariyanti, J. 2018. Morfometrik dan Meristik Ikan Tor (Tor spp.) di DAS Wampu Kabupaten Langkat, Sumatera Utara, Indonesia. *Journal of Tropical Fisheries Management*, 2(2), 68–74. <https://doi.org/10.29244/jppt.v2i2.26323>
- Dewantoro, E. 2001. *Rasio RNA/DNA, Karakter Morfometrik dan Komposisi Daging Ikan Mas (Cyprinus carpio L.) Strain Sinyonya, Karper Kaca, dan Hibridanya*. Institut Pertanian Bogor.
- Djajasewaka & Djajadiredja R. 1990. *Budidaya Ikan di Indonesia. Cara Pengembangannya*. Badan Litbang Pertanian. Lembaga Penelitian Perikanan Darat. Jakarta. 48 Halaman.
- Egradini, A. R., Ernawati, Y., & Kamal, M. M. 2018. Ecological and growth aspect of Tank Goby (*Glossogobius giuris*, Hamilton–Buchanan 1822) in Tempe Lake, South Sulawesi. *Prosiding Simposium Nasional Kelautan Dan Perikanan V*, 99–106. <http://journal.unhas.ac.id/index.php/proceedingsimnaskp/article/view/4638>
- Elliott, N.G., Haskard, K. & Koslow, J. A. 1995. Morphometric Analysis of Orange Roughy (*Hoplostethus atlanticus*) off the Continental Slope of Southern Australia. *Journal of Fish Biology*. 46(2): 202-220.
- Erna. 2022. Analisis Parameter Fisika Kimia sebagai Salah Satu Penentu Kualitas Air di Danau Sidenreng Kabupaten Sidenreng Rappang, Provinsi Sulawesi Selatan. Skripsi. Program Studi Manajemen Sumber Daya Perairan. Fakultas Ilmu Kelautan dan Perikanan. Universitas Hasanuddin. Makassar.
- Fadhil, R., Muchlisin, Z. A., & Sari, W. 2016. Hubungan Panjang-Berat dan Morfometrik Ikan Julung-Julung (*Zenarchopterus dispar*) dari Perairan Pantai Utara Aceh. *Jurnal Ilmiah Mahasiswa Kelautan Dan Perikanan Unsyiah*, 1(1), 146–159.
- Hamka, I. M., & Naping, H. 2019. Nelayan Danau Tempe: Strategi Adaptasi Masyarakat dalam Menghadapi Kondisi Perubahan Musim. *ETNOSIA: Jurnal Etnografi Indonesia*, 4(1), 59–72. <https://doi.org/10.31947/etnosia.v4i1.5485>
- Hasnidar, Tamsil, A., Akram, A. M., & Hidayat, T. 2021. Analisis Kimia Ikan Sapu-Sapu (*Pterygoplichthys pardalis* Castelnau 1855) dari Danau Tempe. *Jurnal Pengolahan Hasil Perikanan Indonesia*, 24(1), 78–88.
- Hasrianti, Surianti, & Razak, M. R. R. 2020. Pengaruh Ledakan Populasi Ikan Sapu-Sapu (*Pterygoplichthys spp.*) Terhadap Produksi Hasil Tangkapan Jaring Insang di Perairan Danau Sidenreng. *ALBACORE Jurnal Penelitian Perikanan Laut*, 4(1), 013–019. <https://doi.org/10.29244/core.4.1.013-019>
- Jamal, K., Rahmatia, F., & Dhewantara, Y. L. 2019. Deteksi Molekuler Tilapia Lake Virus (TiLV) pada Ikan Nila (*Oreochromis niloticus*) yang dilalulintaskan di Balai Besar KIPM Jakarta I. *Jurnal Ilmiah Satya Minabahari*, 4(2), 115–121. <https://doi.org/10.53676/jism.v4i2.69>
- Kerlinger, F., & Lee, H. 2000. *Foundations of behavioral research*. Orlando, FL: Harcourt College Publishers.
- Kordi. 1997. *Budidaya Air Payau. Penerbit Effhar dan Dahara Prize: Jakarta Barat*.

- Kudsiyah, H., Hidayani, A. A., Suwarni, S., Rahim, S. W., Umar, M. T., Rifa'i, M. A., & Andriyono, S. 2022. Morphometric and Phylogenetic Analysis of Goby Fish (*Glossogobius giurus*) in the Three Integrated Lakes on South Sulawesi, Indonesia. *International Journal of Conservation Science*, 13(4), 1343–1360.
- Mahfuj, M. S. E., Rahman, M. M., Islam, M., Samad, M. A., Paul, A. K., & Adhikary, R. K. 2019. Landmark-based Morphometric and Meristic Variations of Freshwater Garfish, *Xenentodon Cancila* from Four Natural Stocks of South-Western Bangladesh. *Journal of Advanced Veterinary and Animal Research*, 6(1), 117–124. <https://doi.org/10.5455/javar.2019.f321>
- Muhotimah, Triyatmo, B., Priyono, S. B., & Kuswoyo, T. 2013. Analisis Morfometrik dan Meristik Nila (*Oreochromis* sp.) Strain Larasati F5 dan Tetuannya. *Jurnal Perikanan Universitas Gadjah Mada*, 15(1), 42–53. <https://doi.org/10.22146/jfs.9096>
- Mukhlis, Abdullah, B., & Setiawati, H. 2021. Dampak Restocking terhadap Nilai Produksi Ikan di Danau Sidenreng Kabupaten Sidenreng Rappang. *Jurnal Ilmiah Ecosystem*, 21(2), 245–259. <https://doi.org/10.35965/eco.v21i2.1073>
- Mulqan, M., Rahimi, S. A. El, & Dewiyanti, I. 2017. Pertumbuhan dan Kelangsungan Hidup Benih Ikan Nila Gesit (*Oreochromis niloticus*) pada Sistem Akuaponik Dengan Jenis Tanaman yang Berbeda. *Jurnal Ilmiah Mahasiswa Kelautan dan Perikanan Unsyiah*, 2(1), 183–193.
- Nurmadinah. 2016. Studi Ciri Morfometrik dan Meristik Ikan Penja Asal Polewali Mandar dan Ikan Nike (*Awaous melanocephalus*) Asal Gorontalo [skripsi]. *UIN Alauddin Makassar*, 1–62.
- Prafiadi, S., & Maturahmah, E. 2020. Variasi Morfometrik Ikan Mujair (*Oreochromis mossambicus*) pada Ekosistem Rawa (Lentik Water) di Wilayah Prafi, Masni dan Sidey, Kabupaten Manokwari. *Jurnal Biosilampari: Jurnal Biologi*, 2(2), 58–66. <https://doi.org/10.31540/biosilampari.v2i2.888>
- Rahim, S. W., Takhir, Q. A., Kudsiyah, H., Rukminasari, N., Suwarni, & Yanuarita, D. 2022. Water Quality Analysis in Tempe Lake Wajo Regency, South Sulawesi. *IOP Conference Series: Earth and Environmental Science*, 1119(1). <https://doi.org/10.1088/1755-1315/1119/1/012090>
- Rokocy, J. E. (2009). Food Agricultural Organization of the United Nation (FAO) *Oreochromis niloticus* (Linnaeus, 1758). In *Cultured Aquatic Species Fact Sheets*.
- Safitri, R. 2017. Deskripsi Morfologi Ikan yang Tertangkap di Aliran Sungai Percut. *Jurnal Nukleus*, 3(1), 17–24.
- Samaradivakara, S., Hirimuthugoda, N., Gunawardana, R., Illeperuma, R., Fernandopulle, N., Silva, A. De, & Alexander, P. 2012. Morphological Variation of Four Tilapia Populations in Selected Reservoirs in Sri Lanka. *Tropical Agricultural Research*, 23(2), 105–116. <https://doi.org/10.4038/tar.v23i2.4642>
- Sonyenzellnd, N., Mustahal, & Haryati, S. 2015. Studi Mengenai Morfometrik dan Meristik Ikan Payus (*Elops hawaiiensis*) di Wilayah Perairan Utara Provinsi Banten. *Jurnal Perikanan Dan Kelautan*, 5(1), 5–11.
- Susilawati, Tarno, S., Setiawan, A., Sarmila, Mudlofar, F., Warastuti, S., Hutagalung, R. A., & Putri, H. K. 2022. Teknik Budidaya Ikan Nila (*Oreochromis niloticus*) Monosex

sebagai Alternatif dalam Meningkatkan Produktifitas Pembudidayaan Ikan pada Keramba Jaring Apung di Dusun Buntut Limbung, Desa Muara Baru Kecamatan Sungai Raya Kabupaten Kubu Raya. *Jurnal Kapuas*, 2(1), 12–19.

- Turan, C. 1999. A note on the examination of morphometric differentiation among fish populations: The Truss System. *Turkish Journal of Zoology*, 23(3), 259–263.
- Tzeng, T. Der, Chiu, C. S., & Yeh, S. Y. 2001. Morphometric variation in red-spot prawn (*Metapenaeopsis barbata*) in different geographic waters off Taiwan. *Fisheries Research*, 53(3), 211–217. [https://doi.org/10.1016/S0165-7836\(00\)00286-1](https://doi.org/10.1016/S0165-7836(00)00286-1)
- Vedra, S. A., Roa, E. C., Salarda, M. Y., Gaid, R. D., Roa, R. L., Samson, J. J., Eballe, R. C., Dela Peña, G. D., James, M., Baclayon, O., & Rigor, M. R. 2019. Describing the Morphological Attributes of *Glossogobius giuris* (Hamilton 1882) in Lake Mainit, Northeastern Mindanao, Philippines. *World Journal of Environmental and Agricultural Sciences*, 3(1), 1–14. <http://www.wjeas.com/>
- Widiyanto, I. N. 2008. *Kajian Pola Pertumbuhan dan Ciri Morfometrik-Meristik Beberapa Spesies Ikan Layur (Superfamili Trichiuroidea) di Perairan Palabuhan Ratu, Sukabumi, Jawa Barat.*
- Widiyati, A., Subandriyo, Sumantadinata, K., Hadie, W., & Nugroho, E. 2004. Keragaman Morfologi dan Fluktuasi Asimetri Ikan Nila (*Oreochromis niloticus*) dari Danau Tempe (Sulawesi Selatan) dan Beberapa Sentra Produksi di Jawa Barat. *Jurnal Penelitian Perikanan Indonesia*, 10(5), 47–54.

# LAMPIRAN

Lampiran 1. Penentuan frekuensi kelas panjang standar ikan nila di Danau Tempe dan Danau Sidenreng

Kelas terkecil	: 85
Kelas terbesar	: 170
Logaritma terkecil	: 1,9294
Logaritma terbesar	: 2,2304
Beda logaritma	: 0,3010
Banyak kelas	: 10
Beda logaritma tengah kelas	: 0,0301
Logaritma tengah kelas pertama	: 1,9445

Logaritma kelas:

1. 1,9294 - 1,9595
2. 1,9595 - 1,9896
3. 1,9896 - 2,0197
4. 2,0197 - 2,0498
5. 2,0498 - 2,0799
6. 2,0799 - 2,1100
7. 2,1100 - 2,1401
8. 2,1401 - 2,1702
9. 2,1702 - 2,2003
10. 2,2003 - 2,2304

Kelas:

1. 85,00-90,10
2. 90,10-97,64
3. 97,64-104,65
4. 104,65-112,16
5. 112,16-120,21
6. 120,21-128,84
7. 128,84-138,08
8. 138,08-147,99
9. 147,99-158,62
10. 158,62-170,00

Lampiran 2. Perbandingan morfometrik (mm) ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina dan jantan di Danau Tempe

Karakter	Kode	BT		JT		T <sub>hitung</sub>	T <sub>tabel</sub>	Ket.
		Kisaran (mm) n = 30	Rerata ± sd	Kisaran (mm) n = 30	Rerata ± sd			
Panjang Total	PT	132-215	167,40 ± 0,21	112-193	151,50 ± 0,16	-0,013	2,002	Tidak berbeda nyata
Panjang Badan	PB	71-125	94,70 ± 0,14	65-107	81,93 ± 0,11	0,946	2,002	Tidak berbeda nyata
Panjang Kepala	PK	23-60	44,57 ± 0,07	25-50	38,90 ± 0,05	0,653	2,002	Tidak berbeda nyata
Tinggi Badan	TB	45-80	57,07 ± 0,08	35-72	50,43 ± 0,06	0,566	2,002	Tidak berbeda nyata
Tinggi Leher	TL	25-60	46,70 ± 0,06	22-57	41,73 ± 0,07	0,223	2,002	Tidak berbeda nyata
Muka	Mu	12-39	25,90 ± 0,05	9-37	22,33 ± 0,07	0,536	2,002	Tidak berbeda nyata
Hidung	Hi	5-20	9,63 ± 0,02	6-11	7,13 ± 0,01	2,769	2,002	Berbeda nyata
Rahang	Rh	9-20	14,43 ± 0,03	8-25	11,27 ± 0,03	1,655	2,002	Tidak berbeda nyata
Dahi	Dh	13-35	21,20 ± 0,05	9-28	16,57 ± 0,05	1,636	2,002	Tidak berbeda nyata
Tinggi Batang Ekor	TBE	14-30	20,97 ± 0,04	10-23	17,13 ± 0,03	1,762	2,002	Tidak berbeda nyata

Lampiran 3. Hasil uji statistik morfometrik (mm) ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina dan jantan di Danau Tempe

**Group Statistics**

	Kelompok sampel	N	Mean	Std. Deviation	Std. Error Mean
PT	BT	30	1.2832	.20878	.03812
	JT	30	1.2838	.15694	.02865
PB	BT	30	.7271	.14453	.02639
	JT	30	.6956	.11125	.02031
PK	BT	30	.3406	.07090	.01294
	JT	30	.3299	.05458	.00996
TB	BT	30	.4372	.07891	.01441
	JT	30	.4268	.06251	.01141
TL	BT	30	.3576	.06569	.01199
	JT	30	.3538	.06659	.01216
Mu	BT	30	.1982	.05350	.00977
	JT	30	.1896	.06958	.01270
Hi	BT	30	.0724	.01947	.00355
	JT	30	.0605	.01321	.00241
Rh	BT	30	.1109	.03585	.00655
	JT	30	.0959	.03430	.00626
Dh	BT	30	.1627	.05349	.00977
	JT	30	.1407	.05080	.00927
TBE	BT	30	.1613	.04018	.00734
	JT	30	.1455	.02871	.00524



Lampiran 3. 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
PT	Equal variances assumed	3.641	.061	-.013	58	.990	-.00060	.04769	-.09605	.09486
	Equal variances not assumed			-.013	53.842	.990	-.00060	.04769	-.09621	.09501
PB	Equal variances assumed	2.683	.107	.946	58	.348	.03151	.03330	-.03515	.09816
	Equal variances not assumed			.946	54.435	.348	.03151	.03330	-.03525	.09826
PK	Equal variances assumed	2.771	.101	.653	58	.516	.01066	.01634	-.02203	.04336
	Equal variances not assumed			.653	54.437	.517	.01066	.01634	-.02208	.04341
TB	Equal variances assumed	1.644	.205	.566	58	.574	.01040	.01838	-.02639	.04720
	Equal variances not assumed			.566	55.116	.574	.01040	.01838	-.02643	.04724
TL	Equal variances assumed	.332	.567	.223	58	.824	.00381	.01708	-.03038	.03799
	Equal variances not assumed			.223	57.989	.824	.00381	.01708	-.03038	.03799
Mu	Equal variances assumed	.008	.928	.536	58	.594	.00858	.01603	-.02349	.04066
	Equal variances not assumed			.536	54.410	.594	.00858	.01603	-.02354	.04071
Hi	Equal variances assumed	3.658	.061	2.769	58	.008	.01190	.00430	.00330	.02049
	Equal variances not assumed			2.769	51.047	.008	.01190	.00430	.00327	.02052
Rh	Equal variances assumed	.030	.862	1.655	58	.103	.01499	.00906	-.00314	.03313
	Equal variances not assumed			1.655	57.886	.103	.01499	.00906	-.00314	.03313
Dh	Equal variances assumed	.583	.448	1.636	58	.107	.02204	.01347	-.00492	.04900
	Equal variances not assumed			1.636	57.846	.107	.02204	.01347	-.00492	.04900
TBE	Equal variances assumed	.892	.349	1.762	58	.083	.01589	.00902	-.00216	.03393
	Equal variances not assumed			1.762	52.493	.084	.01589	.00902	-.00220	.03397

Lampiran 4. Perbandingan morfometrik (mm) ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina dan jantan di Danau Sidenreng

Karakter	Kode	BS		JS		T <sub>hitung</sub>	T <sub>tabel</sub>	Ket.
		Kisaran (mm) n = 30	Rerata ± sd	Kisaran (mm) n = 30	Rerata ± sd			
Panjang Total	PT	106-203	132,03 ± 0,22	130-193	162,43 ± 0,17	-0,596	2,002	Tidak berbeda nyata
Panjang Badan	PB	56-110	71,20 ± 0,12	70-100	85,23 ± 0,10	0,085	2,002	Tidak berbeda nyata
Panjang Kepala	PK	21-57	35,97 ± 0,06	32-53	43,43 ± 0,04	-0,045	2,002	Tidak berbeda nyata
Tinggi Badan	TB	33-61	42,00 ± 0,07	42-65	55,93 ± 0,06	-2,516	2,002	Tidak berbeda nyata
Tinggi Leher	TL	21-57	35,47 ± 0,07	22-57	44,60 ± 0,06	-0,954	2,002	Tidak berbeda nyata
Muka	Mu	9-39	23,33 ± 0,05	14-36	26,83 ± 0,05	0,747	2,002	Tidak berbeda nyata
Hidung	Hi	5-12	7,30 ± 0,02	5-10	7,20 ± 0,01	3,559	2,002	Berbeda nyata
Rahang	Rh	7-26	10,50 ± 0,03	6-12	9,03 ± 0,02	4,587	2,002	Berbeda nyata
Dahi	Dh	7-27	11,00 ± 0,03	9-25	16,00 ± 0,04	-2,604	2,002	Tidak berbeda nyata
Tinggi Batang Ekor	TBE	13-24	16,77 ± 0,03	11-25	19,43 ± 0,03	0,726	2,002	Tidak berbeda nyata

Lampiran 5. Hasil uji statistik morfometrik (mm) ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina dan jantan di Danau Sidenreng

Group Statistics					
	Kelompok sampel	N	Mean	Std. Deviation	Std. Error Mean
PT	BS	30	1.2868	.21620	.03947
	JS	30	1.3166	.16757	.03059
PB	BS	30	.6938	.11891	.02171
	JS	30	.6913	.10056	.01836
PK	BS	30	.3508	.06153	.01123
	JS	30	.3515	.04712	.00860
TB	BS	30	.4097	.07003	.01279
	JS	30	.4535	.06471	.01181
TL	BS	30	.3453	.06625	.01210
	JS	30	.3611	.06199	.01132
Mu	BS	30	.2269	.05041	.00920
	JS	30	.2172	.04982	.00910
Hi	BS	30	.0714	.01670	.00305
	JS	30	.0581	.01169	.00213
Rh	BS	30	.1011	.02607	.00476
	JS	30	.0734	.02026	.00370
Dh	BS	30	.1050	.03019	.00551
	JS	30	.1296	.04215	.00769
TBE	BS	30	.1638	.03208	.00586
	JS	30	.1576	.03367	.00615

Lampiran 5. 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
PT	Equal variances assumed	3.364	.072	-0.596	58	.553	-.02978	.04994	-.12974	.07019
	Equal variances not assumed			-0.596	54.602	.553	-.02978	.04994	-.12988	.07032
PB	Equal variances assumed	1.277	.263	.085	58	.932	.00243	.02843	-.05449	.05934
	Equal variances not assumed			.085	56.442	.932	.00243	.02843	-.05452	.05937
PK	Equal variances assumed	3.072	.085	-.045	58	.964	-.00064	.01415	-.02896	.02768
	Equal variances not assumed			-.045	54.308	.964	-.00064	.01415	-.02900	.02773
TB	Equal variances assumed	.522	.473	-2.516	58	.015	-.04380	.01741	-.07865	-.00895
	Equal variances not assumed			-2.516	57.641	.015	-.04380	.01741	-.07865	-.00895
TL	Equal variances assumed	.081	.776	-.954	58	.344	-.01580	.01656	-.04896	.01735
	Equal variances not assumed			-.954	57.745	.344	-.01580	.01656	-.04896	.01736
Mu	Equal variances assumed	.962	.331	.747	58	.458	.00967	.01294	-.01623	.03557
	Equal variances not assumed			.747	57.992	.458	.00967	.01294	-.01623	.03557
Hi	Equal variances assumed	5.399	.024	3.559	58	.001	.01325	.00372	.00580	.02070
	Equal variances not assumed			3.559	51.932	.001	.01325	.00372	.00578	.02071
Rh	Equal variances assumed	1.464	.231	4.587	58	.000	.02765	.00603	.01558	.03972
	Equal variances not assumed			4.587	54.663	.000	.02765	.00603	.01557	.03973
Dh	Equal variances assumed	4.292	.043	-2.604	58	.012	-.02465	.00947	-.04360	-.00570
	Equal variances not assumed			-2.604	52.563	.012	-.02465	.00947	-.04364	-.00566
TBE	Equal variances assumed	.004	.951	.726	58	.471	.00616	.00849	-.01083	.02316
	Equal variances not assumed			.726	57.866	.471	.00616	.00849	-.01083	.02316

Lampiran 6. Perbandingan morfometrik (mm) ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina di Danau Tempe dan Danau Sidenreng

Karakter	Kode	BT		BS		T <sub>hitung</sub>	T <sub>tabel</sub>	Ket.
		Kisaran (mm) n = 30	Rerata ± sd	Kisaran (mm) n = 30	Rerata ± sd			
Panjang Total	PT	132-215	167,40 ± 0,21	106-203	132,03 ± 0,22	-0,066	2,002	Tidak berbeda nyata
Panjang Badan	PB	71-125	94,70 ± 0,14	56-110	71,20 ± 0,12	0,974	2,002	Tidak berbeda nyata
Panjang Kepala	PK	23-60	44,57 ± 0,07	21-57	35,97 ± 0,06	-0,599	2,002	Tidak berbeda nyata
Tinggi Badan	TB	45-80	57,07 ± 0,08	33-61	42,00 ± 0,07	1,428	2,002	Tidak berbeda nyata
Tinggi Leher	TL	25-60	46,70 ± 0,06	21-57	35,47 ± 0,07	0,721	2,002	Tidak berbeda nyata
Muka	Mu	12-39	25,90 ± 0,05	9-39	23,33 ± 0,05	-2,138	2,002	Berbeda nyata
Hidung	Hi	5-20	9,63 ± 0,02	5-12	7,30 ± 0,02	0,230	2,002	Tidak berbeda nyata
Rahang	Rh	9-20	14,43 ± 0,03	7-26	10,50 ± 0,03	1,207	2,002	Tidak berbeda nyata
Dahi	Dh	13-35	21,20 ± 0,05	7-27	11,00 ± 0,03	5,149	2,002	Berbeda nyata
Tinggi Batang Ekor	TBE	14-30	20,97 ± 0,04	13-24	16,77 ± 0,03	-0,259	2,002	Tidak berbeda nyata

Lampiran 7. Hasil uji statistik morfometrik (mm) ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina di Danau Tempe dan Danau Sidenreng

**Group Statistics**

	Kelompok sampel	N	Mean	Std. Deviation	Std. Error Mean
PT	BT	30	1.2832	.20878	.03812
	BS	30	1.2868	.21620	.03947
PB	BT	30	.7271	.14453	.02639
	BS	30	.6938	.11891	.02171
PK	BT	30	.3406	.07090	.01294
	BS	30	.3508	.06153	.01123
TB	BT	30	.4372	.07891	.01441
	BS	30	.4097	.07003	.01279
TL	BT	30	.3576	.06569	.01199
	BS	30	.3453	.06625	.01210
Mu	BT	30	.1982	.05350	.00977
	BS	30	.2269	.05041	.00920
Hi	BT	30	.0724	.01947	.00355
	BS	30	.0714	.01670	.00305
Rh	BT	30	.1109	.03585	.00655
	BS	30	.1011	.02607	.00476
Dh	BT	30	.1627	.05349	.00977
	BS	30	.1050	.03019	.00551
TBE	BT	30	.1613	.04018	.00734
	BS	30	.1638	.03208	.00586

Lampiran 7. 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
PT	Equal variances assumed	.044	.835	-.066	58	.948	-.00362	.05487	-.11346	.10622
	Equal variances not assumed			-.066	57.929	.948	-.00362	.05487	-.11346	.10622
PB	Equal variances assumed	.497	.484	.974	58	.334	.03329	.03417	-.03511	.10169
	Equal variances not assumed			.974	55.924	.334	.03329	.03417	-.03517	.10174
PK	Equal variances assumed	.405	.527	-.599	58	.552	-.01027	.01714	-.04457	.02404
	Equal variances not assumed			-.599	56.872	.552	-.01027	.01714	-.04459	.02406
TB	Equal variances assumed	.095	.759	1.428	58	.159	.02751	.01926	-.01105	.06607
	Equal variances not assumed			1.428	57.194	.159	.02751	.01926	-.01106	.06608
TL	Equal variances assumed	.065	.799	.721	58	.474	.01228	.01703	-.02182	.04637
	Equal variances not assumed			.721	57.996	.474	.01228	.01703	-.02182	.04637
Mu	Equal variances assumed	.057	.813	-2.138	58	.037	-.02870	.01342	-.05556	-.00183
	Equal variances not assumed			-2.138	57.795	.037	-.02870	.01342	-.05556	-.00183
Hi	Equal variances assumed	.138	.712	.230	58	.819	.00108	.00468	-.00830	.01045
	Equal variances not assumed			.230	56.685	.819	.00108	.00468	-.00830	.01045
Rh	Equal variances assumed	.024	.878	1.207	58	.232	.00977	.00809	-.00643	.02597
	Equal variances not assumed			1.207	52.967	.233	.00977	.00809	-.00646	.02600
Dh	Equal variances assumed	6.056	.017	5.149	58	.000	.05775	.01121	.03530	.08020
	Equal variances not assumed			5.149	45.777	.000	.05775	.01121	.03517	.08033
TBE	Equal variances assumed	.652	.423	-.259	58	.796	-.00243	.00939	-.02122	.01636
	Equal variances not assumed			-.259	55.292	.797	-.00243	.00939	-.02124	.01638

Lampiran 8. Perbandingan morfometrik (mm) ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) jantan di Danau Tempe dan Danau Sidenreng

Karakter	Kode	JT		JS		T <sub>hitung</sub>	T <sub>tabel</sub>	Ket.
		Kisaran (mm) n = 30	Rerata ± sd	Kisaran (mm) n = 30	Rerata ± sd			
Panjang Total	PT	112-193	151,50 ± 0,16	130-193	162,43 ± 0,17	-0,782	2,002	Tidak berbeda nyata
Panjang Badan	PB	65-107	81,93 ± 0,11	70-100	85,23 ± 0,10	0,154	2,002	Tidak berbeda nyata
Panjang Kepala	PK	25-50	38,90 ± 0,05	32-53	43,43 ± 0,04	-1,638	2,002	Tidak berbeda nyata
Tinggi Badan	TB	35-72	50,43 ± 0,06	42-65	55,93 ± 0,06	-1,625	2,002	Tidak berbeda nyata
Tinggi Leher	TL	22-57	41,73 ± 0,07	22-57	44,60 ± 0,06	-0,442	2,002	Tidak berbeda nyata
Muka	Mu	9-37	22,33 ± 0,07	14-36	26,83 ± 0,05	-1,767	2,002	Tidak berbeda nyata
Hidung	Hi	6-11	7,13 ± 0,01	5-10	7,20 ± 0,01	0,754	2,002	Tidak berbeda nyata
Rahang	Rh	8-25	11,27 ± 0,03	6-12	9,03 ± 0,02	3,084	2,002	Berbeda nyata
Dahi	Dh	9-28	16,57 ± 0,05	9-25	16,00 ± 0,04	0,918	2,002	Tidak berbeda nyata
Tinggi Batang Ekor	TBE	10-23	17,13 ± 0,03	11-25	19,43 ± 0,03	-1,505	2,002	Tidak berbeda nyata



Lampiran 9. Hasil uji statistik morfometrik (mm) ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) jantan di Danau Tempe dan Danau Sidenreng

**Group Statistics**

	Kelompok sampel	N	Mean	Std. Deviation	Std. Error Mean
PT	JT	30	1.2838	.15694	.02865
	JS	30	1.3166	.16757	.03059
PB	JT	30	.6956	.11125	.02031
	JS	30	.6913	.10056	.01836
PK	JT	30	.3299	.05458	.00996
	JS	30	.3515	.04712	.00860
TB	JT	30	.4268	.06251	.01141
	JS	30	.4535	.06471	.01181
TL	JT	30	.3538	.06659	.01216
	JS	30	.3611	.06199	.01132
Mu	JT	30	.1896	.06958	.01270
	JS	30	.2172	.04982	.00910
Hi	JT	30	.0605	.01321	.00241
	JS	30	.0581	.01169	.00213
Rh	JT	30	.0959	.03430	.00626
	JS	30	.0734	.02026	.00370
Dh	JT	30	.1407	.05080	.00927
	JS	30	.1296	.04215	.00769
TBE	JT	30	.1455	.02871	.00524
	JS	30	.1576	.03367	.00615

Lampiran 9. 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
PT	Equal variances assumed	.032	.858	-.782	58	.437	-.03280	.04192	-.11670	.05111
	Equal variances not assumed			-.782	57.753	.437	-.03280	.04192	-.11671	.05111
PB	Equal variances assumed	.019	.892	.154	58	.878	.00421	.02738	-.05059	.05902
	Equal variances not assumed			.154	57.417	.878	.00421	.02738	-.05061	.05903
PK	Equal variances assumed	.215	.645	-1.638	58	.107	-.02157	.01316	-.04792	.00478
	Equal variances not assumed			-1.638	56.790	.107	-.02157	.01316	-.04793	.00479
TB	Equal variances assumed	.155	.695	-1.625	58	.110	-.02669	.01643	-.05958	.00619
	Equal variances not assumed			-1.625	57.931	.110	-.02669	.01643	-.05958	.00619
TL	Equal variances assumed	.004	.947	-.442	58	.660	-.00733	.01661	-.04058	.02592
	Equal variances not assumed			-.442	57.704	.660	-.00733	.01661	-.04059	.02592
Mu	Equal variances assumed	.816	.370	-1.767	58	.082	-.02761	.01562	-.05889	.00366
	Equal variances not assumed			-1.767	52.546	.083	-.02761	.01562	-.05896	.00373
Hi	Equal variances assumed	.142	.707	.754	58	.454	.00243	.00322	-.00402	.00888
	Equal variances not assumed			.754	57.154	.454	.00243	.00322	-.00402	.00888
Rh	Equal variances assumed	1.749	.191	3.084	58	.003	.02243	.00727	.00787	.03698
	Equal variances not assumed			3.084	47.038	.003	.02243	.00727	.00780	.03706
Dh	Equal variances assumed	.023	.879	.918	58	.363	.01106	.01205	-.01306	.03518
	Equal variances not assumed			.918	56.089	.363	.01106	.01205	-.01308	.03520
TBE	Equal variances assumed	.000	.991	-1.505	58	.138	-.01215	.00808	-.02832	.00402
	Equal variances not assumed			-1.505	56.591	.138	-.01215	.00808	-.02833	.00403

Lampiran 10. Hasil uji diskriminan ikan nila, *Oreochromis niloticus* (Linnaeus,1758) yang tertangkap selama penelitian di Danau Tempe dan Danau Sidenreng

Karakter Morfometrik	Mean	Wilks' Lambda	F	df1	df2	Sig.	Ket.
PT	1.2926	0.9944	0.2167	3	116	0.8846	Tidak berbeda nyata
PB	0.7019	0.9849	0.5917	3	116	0.6217	Tidak berbeda nyata
PK	0.3432	0.9776	0.8862	3	116	0.4505	Tidak berbeda nyata
TB	0.4318	0.9483	2.1084	3	116	0.1029	Tidak berbeda nyata
TL	0.3545	0.9916	0.3256	3	116	0.8068	Tidak berbeda nyata
Mu	0.2080	0.9335	2.7537	3	116	0.0457	Berbeda nyata
Hi	0.0656	0.8529	6.6692	3	116	0.0003	Berbeda nyata
Rh	0.0953	0.8200	8.4886	3	116	0.0000	Berbeda nyata
Dh	0.1345	0.8196	8.5136	3	116	0.0000	Berbeda nyata
TBE	0.1570	0.9573	1.7243	3	116	0.1659	Tidak berbeda nyata

Lampiran 11. Perbandingan meristik ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina dan jantan di Danau Tempe

Meristik	Kode	BT		JT		$t_{hitung}$	$t_{tabel}$	Ket.
		Kisaran n = 30 ekor	Rerata $\pm$ sd	Kisaran n = 30 ekor	Rerata $\pm$ sd			
Jumlah sisik linea lateralis	a	27-35	29,63 $\pm$ 2,19	28-36	30,97 $\pm$ 2,89	-2,012	2,002	Berbeda nyata
Jumlah sisik di bawah linea lateralis	b	10-15	12,87 $\pm$ 1,50	8-14	11,40 $\pm$ 1,69	3,548	2,002	Berbeda nyata
Jumlah sisik di atas linea lateralis	c	4-6	5,50 $\pm$ 0,68	4-6	5,23 $\pm$ 0,68	1,517	2,002	Tidak berbeda nyata
Jumlah sisik di muka sirip punggung	d	8-13	11,23 $\pm$ 1,63	8-12	11,07 $\pm$ 1,34	0,432	2,002	Tidak berbeda nyata
Jumlah sisik di sekeliling batang ekor	e	5-7	5,83 $\pm$ 0,59	5-7	6,43 $\pm$ 0,57	-4,004	2,002	Berbeda nyata
Jari-jari lemah sirip punggung	f	10-14	12,07 $\pm$ 0,94	8-14	11,57 $\pm$ 1,43	1,597	2,002	Tidak berbeda nyata
Jari-jari keras sirip punggung	g	15-18	16,30 $\pm$ 0,79	14-17	16,27 $\pm$ 0,64	0,179	2,002	Tidak berbeda nyata
Jari-jari keras sirip anal	h	3	3,00 $\pm$ 0,00 <sup>a</sup>	3	3,00 $\pm$ 0,00 <sup>a</sup>	-	2,002	Tidak berbeda nyata
Jari-jari lemah sirip anal	i	7-10	8,80 $\pm$ 0,81	7-10	8,47 $\pm$ 0,68	1,731	2,002	Tidak berbeda nyata
Jari-jari sirip lemah dada	j	11-14	12,20 $\pm$ 0,76	8-14	11,73 $\pm$ 1,28	1,712	2,002	Tidak berbeda nyata
Jari-jari keras sirip perut	k	1	1,00 $\pm$ 0,00 <sup>a</sup>	1	1,00 $\pm$ 0,00 <sup>a</sup>	-	2,002	Tidak berbeda nyata
Jari-jari lemah sirip perut	l	3-5	4,63 $\pm$ 0,67	3-5	4,80 $\pm$ 0,48	-1,106	2,002	Tidak berbeda nyata
Jari-jari sirip ekor	m	15-17	16,13 $\pm$ 0,63	15-17	16,13 $\pm$ 0,63	0,000	2,002	Tidak berbeda nyata

Lampiran 12. Hasil uji statistik meristik ikan nila, *Oreochromis niloticus* (Linneaus, 1758) betina dan jantan di Danau Tempe

Group Statistics					
	Kelompok sampel	N	Mean	Std. Deviation	Std. Error Mean
a	BT	30	29.6333	2.18905	.39966
	JT	30	30.9667	2.89451	.52846
b	BT	30	12.8667	1.50249	.27432
	JT	30	11.4000	1.69380	.30924
c	BT	30	5.5000	.68229	.12457
	JT	30	5.2333	.67891	.12395
d	BT	30	11.2333	1.63335	.29821
	JT	30	11.0667	1.33735	.24417
e	BT	30	5.8333	.59209	.10810
	JT	30	6.4333	.56832	.10376
f	BT	30	12.0667	.94443	.17243
	JT	30	11.5667	1.43078	.26122
g	BT	30	16.3000	.79438	.14503
	JT	30	16.2667	.63968	.11679
h	BT	30	3.0000	.00000 <sup>a</sup>	.00000
	JT	30	3.0000	.00000 <sup>a</sup>	.00000
i	BT	30	8.8000	.80516	.14700
	JT	30	8.4667	.68145	.12441
j	BT	30	12.2000	.76112	.13896
	JT	30	11.7333	1.28475	.23456
k	BT	30	1.0000	.00000 <sup>a</sup>	.00000
	JT	30	1.0000	.00000 <sup>a</sup>	.00000
l	BT	30	4.6333	.66868	.12208
	JT	30	4.8000	.48423	.08841
m	BT	30	16.1333	.62881	.11480
	JT	30	16.1333	.62881	.11480

a. t cannot be computed because the standard deviations of both groups are 0.

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	
a	3.874	.054	Equal variances assumed	-2.012	58	.049	-1.33333	.66257	-2.65962	-.00705
Equal variances not assumed			-2.012	53.996	.049	-1.33333	.66257	-2.66172	-.00495	
b	1.113	.296	Equal variances assumed	3.548	58	.001	1.46667	.41338	.63920	2.29413
Equal variances not assumed			3.548	57.186	.001	1.46667	.41338	.63895	2.29438	
c	.189	.666	Equal variances assumed	1.517	58	.135	.26667	.17573	-.08510	.61843
Equal variances not assumed			1.517	57.999	.135	.26667	.17573	-.08510	.61843	
d	2.465	.122	Equal variances assumed	.432	58	.667	.16667	.38541	-.60482	.93816
Equal variances not assumed			.432	55.826	.667	.16667	.38541	-.60546	.93880	
e	1.189	.280	Equal variances assumed	-4.004	58	.000	-.60000	.14984	-.89994	-.30006
Equal variances not assumed			-4.004	57.903	.000	-.60000	.14984	-.89995	-.30005	
f	6.133	.016	Equal variances assumed	1.597	58	.116	.50000	.31300	-.12654	1.12654
Equal variances not assumed			1.597	50.239	.116	.50000	.31300	-.12861	1.12861	
g	3.150	.081	Equal variances assumed	.179	58	.859	.03333	.18621	-.33941	.40607
Equal variances not assumed			.179	55.477	.859	.03333	.18621	-.33977	.40644	
i	.286	.595	Equal variances assumed	1.731	58	.089	.33333	.19258	-.05216	.71883
Equal variances not assumed			1.731	56.458	.089	.33333	.19258	-.05239	.71905	
j	4.154	.046	Equal variances assumed	1.712	58	.092	.46667	.27263	-.07907	1.01240
Equal variances not assumed			1.712	47.124	.094	.46667	.27263	-.08176	1.01510	
l	4.688	.035	Equal variances assumed	-1.106	58	.273	-.16667	.15073	-.46839	.13506
Equal variances not assumed			-1.106	52.856	.274	-.16667	.15073	-.46902	.13568	
m	.000	1.000	Equal variances assumed	.000	58	1.000	.00000	.16236	-.32500	.32500
Equal variances not assumed			.000	58.000	1.000	.00000	.16236	-.32500	.32500	

Lampiran 13. Perbandingan meristik ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina dan jantan di Danau Sidenreng

Meristik	Kode	BS		JS		t <sub>hitung</sub>	t <sub>tabel</sub>	Ket.
		Kisaran n = 30 ekor	Rerata ± sd	Kisaran n = 30 ekor	Rerata ± sd			
Jumlah sisik linea lateralis	a	27-32	28,80 ± 1,40	28-34	29,73 ± 1,82	-2,228	2,002	Berbeda nyata
Jumlah sisik di bawah linea lateralis	b	9-13	11,07 ± 1,11	8-13	11,47 ± 1,11	-1,397	2,002	Tidak berbeda nyata
Jumlah sisik di atas linea lateralis	c	5-7	6,27 ± 0,69	5-7	6,00 ± 0,64	1,547	2,002	Tidak berbeda nyata
Jumlah sisik di muka sirip punggung	d	7-12	9,80 ± 1,62	7-15	10,93 ± 1,91	-2,473	2,002	Berbeda nyata
Jumlah sisik di sekeliling batang ekor	e	5-6	5,53 ± 0,51	5-6	5,60 ± 0,50	-0,513	2,002	Tidak berbeda nyata
Jari-jari lemah sirip punggung	f	10-13	12,07 ± 0,69	11-13	12,07 ± 0,69	0,000	2,002	Tidak berbeda nyata
Jari-jari keras sirip punggung	g	16-18	16,57 ± 0,57	14-17	16,43 ± 0,82	0,734	2,002	Tidak berbeda nyata
Jari-jari keras sirip anal	h	3	3,00 ± 0,00 <sup>a</sup>	3	3,00 ± 0,00 <sup>a</sup>	-	2,002	Tidak berbeda nyata
Jari-jari lemah sirip anal	i	8-10	9,17 ± 0,46	8-10	8,97 ± 0,67	1,349	2,002	Tidak berbeda nyata
Jari-jari sirip lemah dada	j	12-13	12,93 ± 0,25	10-14	12,83 ± 0,75	0,695	2,002	Tidak berbeda nyata
Jari-jari keras sirip perut	k	1	1,00 ± 0,00 <sup>a</sup>	1	1,00 ± 0,00 <sup>a</sup>	-	2,002	Tidak berbeda nyata
Jari-jari lemah sirip perut	l	4-5	4,87 ± 0,35	3-5	4,80 ± 0,48	0,614	2,002	Tidak berbeda nyata
Jari-jari sirip ekor	m	15-17	16,07 ± 0,37	15-17	16,17 ± 0,53	-0,850	2,002	Tidak berbeda nyata

Lampiran 14. Hasil uji statistik meristik ikan nila, *Oreochromis niloticus* (Linneaus, 1758) betina dan jantan di Danau Sidenreng

**Group Statistics**

	Kelompok sampel	N	Mean	Std. Deviation	Std. Error Mean
a	BS	30	28.8000	1.39951	.25551
	JS	30	29.7333	1.81817	.33195
b	BS	30	11.0667	1.11211	.20304
	JS	30	11.4667	1.10589	.20191
c	BS	30	6.2667	.69149	.12625
	JS	30	6.0000	.64327	.11744
d	BS	30	9.8000	1.62735	.29711
	JS	30	10.9333	1.91065	.34883
e	BS	30	5.5333	.50742	.09264
	JS	30	5.6000	.49827	.09097
f	BS	30	12.0667	.69149	.12625
	JS	30	12.0667	.69149	.12625
g	BS	30	16.5667	.56832	.10376
	JS	30	16.4333	.81720	.14920
h	BS	30	3.0000	.00000 <sup>a</sup>	.00000
	JS	30	3.0000	.00000 <sup>a</sup>	.00000
i	BS	30	9.1667	.46113	.08419
	JS	30	8.9667	.66868	.12208
j	BS	30	12.9333	.25371	.04632
	JS	30	12.8333	.74664	.13632
k	BS	30	1.0000	.00000 <sup>a</sup>	.00000
	JS	30	1.0000	.00000 <sup>a</sup>	.00000
l	BS	30	4.8667	.34575	.06312
	JS	30	4.8000	.48423	.08841
m	BS	30	16.0667	.36515	.06667
	JS	30	16.1667	.53067	.09689

a. t cannot be computed because the standard deviations of both groups are 0.



Lampiran 14. 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
a	.863	.357	Equal variances assumed	58	.030	-.93333	.41890	-1.77186	-.09481
Equal variances not assumed			54.435	.030	-.93333	.41890	-1.77303	-.09364	
b	.014	.905	Equal variances assumed	58	.168	-.40000	.28634	-.97318	.17318
Equal variances not assumed			57.998	.168	-.40000	.28634	-.97318	.17318	
c	2.822	.098	Equal variances assumed	58	.127	.26667	.17243	-.07849	.61182
Equal variances not assumed			57.700	.127	.26667	.17243	-.07853	.61186	
d	.303	.584	Equal variances assumed	58	.016	-1.13333	.45822	-2.05055	-.21611
Equal variances not assumed			56.568	.016	-1.13333	.45822	-2.05105	-.21562	
e	.856	.359	Equal variances assumed	58	.610	-.06667	.12984	-.32657	.19323
Equal variances not assumed			57.981	.610	-.06667	.12984	-.32657	.19324	
f	.231	.633	Equal variances assumed	58	1.000	.00000	.17854	-.35739	.35739
Equal variances not assumed			58.000	1.000	.00000	.17854	-.35739	.35739	
g	3.071	.085	Equal variances assumed	58	.466	.13333	.18173	-.23044	.49711
Equal variances not assumed			51.734	.466	.13333	.18173	-.23138	.49805	
i	1.245	.269	Equal variances assumed	58	.183	.20000	.14830	-.09685	.49685
Equal variances not assumed			51.496	.183	.20000	.14830	-.09765	.49765	
j	9.233	.004	Equal variances assumed	58	.490	.10000	.14397	-.18819	.38819
Equal variances not assumed			35.609	.492	.10000	.14397	-.19210	.39210	
l	1.705	.197	Equal variances assumed	58	.542	.06667	.10863	-.15078	.28412
Equal variances not assumed			52.469	.542	.06667	.10863	-.15127	.28461	
m	5.515	.022	Equal variances assumed	58	.399	-1.0000	.11761	-.33542	.13542
Equal variances not assumed			51.432	.399	-1.0000	.11761	-.33606	.13606	

Lampiran 15. Perbandingan meristik ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina di Danau Tempe dan Danau Sidenreng

Meristik	Kode	BT		BS		t <sub>hitung</sub>	t <sub>tabel</sub>	Ket.
		Kisaran	Rerata ± sd	Kisaran	Rerata ± sd			
		n = 30 ekor		n = 30 ekor				
Jumlah sisik linea lateralis	a	27-35	29,63 ± 2,19	27-32	28,80 ± 1,40	1,757	2,002	Tidak berbeda nyata
Jumlah sisik di bawah linea lateralis	b	10-15	12,87 ± 1,50	9-13	11,07 ± 1,11	5,274	2,002	Berbeda nyata
Jumlah sisik di atas linea lateralis	c	4-6	5,50 ± 0,68	5-7	6,27 ± 0,69	-4,232	2,002	Berbeda nyata
Jumlah sisik di muka sirip punggung	d	8-13	11,23 ± 1,63	7-12	9,80 ± 1,62	3,405	2,002	Berbeda nyata
Jumlah sisik di sekeliling batang ekor	e	5-7	5,83 ± 0,59	5-6	5,53 ± 0,51	2,107	2,002	Berbeda nyata
Jari-jari lemah sirip punggung	f	10-14	12,07 ± 0,94	10-13	12,07 ± 0,69	0,000	2,002	Tidak berbeda nyata
Jari-jari keras sirip punggung	g	15-18	16,30 ± 0,79	16-18	16,57 ± 0,57	-1,495	2,002	Tidak berbeda nyata
Jari-jari keras sirip anal	h	3	3,00 ± 0,00 <sup>a</sup>	3	3,00 ± 0,00 <sup>a</sup>	-	2,002	Tidak berbeda nyata
Jari-jari lemah sirip anal	i	7-10	8,80 ± 0,81	8-10	9,17 ± 0,46	-2,164	2,002	Berbeda nyata
Jari-jari sirip lemah dada	j	11-14	12,20 ± 0,76	12-13	12,93 ± 0,25	-5,006	2,002	Berbeda nyata
Jari-jari keras sirip perut	k	1	1,00 ± 0,00 <sup>a</sup>	1	1,00 ± 0,00 <sup>a</sup>	-	2,002	Tidak berbeda nyata
Jari-jari lemah sirip perut	l	3-5	4,63 ± 0,67	4-5	4,87 ± 0,35	-1,698	2,002	Tidak berbeda nyata
Jari-jari sirip ekor	m	15-17	16,13 ± 0,63	15-17	16,07 ± 0,37	0,502	2,002	Tidak berbeda nyata

Lampiran 16. Hasil uji statistik meristik ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) betina di Danau Tempe dan Danau Sidenreng

**Group Statistics**

	Kelompok sampel	N	Mean	Std. Deviation	Std. Error Mean
a	BT	30	29.6333	2.18905	.39966
	BS	30	28.8000	1.39951	.25551
b	BS	30	12.8667	1.50249	.27432
	JS	30	11.0667	1.11211	.20304
c	BT	30	5.5000	.68229	.12457
	BS	30	6.2667	.69149	.12625
d	BS	30	11.2333	1.63335	.29821
	JS	30	9.8000	1.62735	.29711
e	BT	30	5.8333	.59209	.10810
	BS	30	5.5333	.50742	.09264
f	BS	30	12.0667	.94443	.17243
	JS	30	12.0667	.69149	.12625
g	BT	30	16.3000	.79438	.14503
	BS	30	16.5667	.56832	.10376
h	BS	30	3.0000	.00000 <sup>a</sup>	.00000
	JS	30	3.0000	.00000 <sup>a</sup>	.00000
i	BT	30	8.8000	.80516	.14700
	BS	30	9.1667	.46113	.08419
j	BS	30	12.2000	.76112	.13896
	JS	30	12.9333	.25371	.04632
k	BT	30	1.0000	.00000 <sup>a</sup>	.00000
	BS	30	1.0000	.00000 <sup>a</sup>	.00000
l	BT	30	4.6333	.66868	.12208
	BS	30	4.8667	.34575	.06312
m	BS	30	16.1333	.62881	.11480
	JS	30	16.0667	.36515	.06667

a. t cannot be computed because the standard deviations of both groups are 0.

Lampiran 16. 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	
a	Equal variances assumed	3.826	.055	1.757	58	.084	.83333	.47436	-.11621	1.78287
	Equal variances not assumed			1.757	49.313	.085	.83333	.47436	-.11978	1.78645
b	Equal variances assumed	4.026	.049	5.274	58	.000	1.80000	.34128	1.11684	2.48316
	Equal variances not assumed			5.274	53.440	.000	1.80000	.34128	1.11560	2.48440
c	Equal variances assumed	.025	.875	-4.323	58	.000	-.76667	.17736	-1.12169	-.41165
	Equal variances not assumed			-4.323	57.990	.000	-.76667	.17736	-1.12169	-.41164
d	Equal variances assumed	.001	.982	3.405	58	.001	1.43333	.42095	.59070	2.27597
	Equal variances not assumed			3.405	57.999	.001	1.43333	.42095	.59070	2.27597
e	Equal variances assumed	.579	.450	2.107	58	.039	.30000	.14237	.01502	.58498
	Equal variances not assumed			2.107	56.671	.040	.30000	.14237	.01488	.58512
f	Equal variances assumed	2.946	.091	.000	58	1.000	.00000	.21371	-.42778	.42778
	Equal variances not assumed			.000	53.152	1.000	.00000	.21371	-.42861	.42861
g	Equal variances assumed	3.199	.079	-1.495	58	.140	-.26667	.17833	-.62363	.09029
	Equal variances not assumed			-1.495	52.524	.141	-.26667	.17833	-.62442	.09109
i	Equal variances assumed	10.092	.002	-2.164	58	.035	-.36667	.16940	-.70576	-.02757
	Equal variances not assumed			-2.164	46.177	.036	-.36667	.16940	-.70762	-.02571
j	Equal variances assumed	26.581	.000	-5.006	58	.000	-.73333	.14648	-1.02654	-.44012
	Equal variances not assumed			-5.006	35.366	.000	-.73333	.14648	-1.03059	-.43608
l	Equal variances assumed	13.293	.001	-1.698	58	.095	-.23333	.13744	-.50844	.04178
	Equal variances not assumed			-1.698	43.472	.097	-.23333	.13744	-.51041	.04375
m	Equal variances assumed	8.385	.005	.502	58	.617	.06667	.13276	-.19908	.33241
	Equal variances not assumed			.502	46.561	.618	.06667	.13276	-.20047	.33381

Lampiran 17. Perbandingan meristik ikan nila, *Oreochromis niloticus* (Linnaeus, 1758) jantan di Danau Tempe dan Danau Sidenreng

Meristik	Kode	JT		JS		t <sub>hitung</sub>	t <sub>tabel</sub>	Ket.
		Kisaran n = 30 ekor	Rerata ± sd	Kisaran n = 30 ekor	Rerata ± sd			
Jumlah sisik linea lateralis	a	28-36	30,97 ± 2,89	28-34	29,73 ± 1,82	1,976	2,002	Tidak berbeda nyata
Jumlah sisik di bawah linea lateralis	b	8-14	11,40 ± 1,69	8-13	11,47 ± 1,11	-0,181	2,002	Tidak berbeda nyata
Jumlah sisik di atas linea lateralis	c	4-6	5,23 ± 0,68	5-7	6,00 ± 0,64	-4,490	2,002	Berbeda nyata
Jumlah sisik di muka sirip punggung	d	8-12	11,07 ± 1,34	7-15	10,93 ± 1,91	0,313	2,002	Tidak berbeda nyata
Jumlah sisik di sekeliling batang ekor	e	5-7	6,43 ± 0,57	5-6	5,60 ± 0,50	6,039	2,002	Berbeda nyata
Jari-jari lemah sirip punggung	f	8-14	11,57 ± 1,43	11-13	12,07 ± 0,69	-1,723	2,002	Tidak berbeda nyata
Jari-jari keras sirip punggung	g	14-17	16,27 ± 0,64	14-17	16,43 ± 0,82	-0,880	2,002	Tidak berbeda nyata
Jari-jari keras sirip anal	h	3	3,00 ± 0,00 <sup>a</sup>	3	3,00 ± 0,00 <sup>a</sup>	-	2,002	Tidak berbeda nyata
Jari-jari lemah sirip anal	i	7-10	8,47 ± 0,68	8-10	8,97 ± 0,67	-2,868	2,002	Berbeda nyata
Jari-jari sirip lemah dada	j	8-14	11,73 ± 1,28	10-14	12,83 ± 0,75	-4,055	2,002	Berbeda nyata
Jari-jari keras sirip perut	k	1	1,00 ± 0,00 <sup>a</sup>	1	1,00 ± 0,00 <sup>a</sup>	-	2,002	Tidak berbeda nyata
Jari-jari lemah sirip perut	l	3-5	4,80 ± 0,48	3-5	4,80 ± 0,48	0,000	2,002	Tidak berbeda nyata
Jari-jari sirip ekor	m	15-17	16,13 ± 0,63	15-17	16,17 ± 0,53	0,222	2,002	Tidak berbeda nyata

Lampiran 18. Hasil uji statistik meristik ikan nila, *Oreochromis niloticus* (Linneaus, 1758) jantan di Danau Tempe dan Danau Sidenreng

**Group Statistics**

	Kelompok sampel	N	Mean	Std. Deviation	Std. Error Mean
a	JT	30	30.9667	2.89451	.52846
	JS	30	29.7333	1.81817	.33195
b	JT	30	11.4000	1.69380	.30924
	JS	30	11.4667	1.10589	.20191
c	JT	30	5.2333	.67891	.12395
	JS	30	6.0000	.64327	.11744
d	JT	30	11.0667	1.33735	.24417
	JS	30	10.9333	1.91065	.34883
e	JT	30	6.4333	.56832	.10376
	JS	30	5.6000	.49827	.09097
f	JT	30	11.5667	1.43078	.26122
	JS	30	12.0667	.69149	.12625
g	JT	30	16.2667	.63968	.11679
	JS	30	16.4333	.81720	.14920
h	JT	30	3.0000	.00000 <sup>a</sup>	.00000
	JS	30	3.0000	.00000 <sup>a</sup>	.00000
i	JT	30	8.4667	.68145	.12441
	JS	30	8.9667	.66868	.12208
j	JT	30	11.7333	1.28475	.23456
	JS	30	12.8333	.74664	.13632
k	JT	30	1.0000	.00000 <sup>a</sup>	.00000
	JS	30	1.0000	.00000 <sup>a</sup>	.00000
l	JT	30	4.8000	.48423	.08841
	JS	30	4.8000	.48423	.08841
m	JT	30	16.1333	.62881	.11480
	JS	30	16.1667	.53067	.09689

a. t cannot be computed because the standard deviations of both groups are 0.

Lampiran 18. 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	
a	9.051	.004	Equal variances assumed	1.976	58	.053	1.23333	.62407	-.01588	2.48255
Equal variances not assumed			1.976	48.802	.054	1.23333	.62407	-.02091	2.48758	
b	9.588	.003	Equal variances assumed	-.181	58	.857	-.06667	.36932	-.80594	.67261
Equal variances not assumed			-.181	49.922	.857	-.06667	.36932	-.80850	.67517	
c	2.066	.156	Equal variances assumed	-4.490	58	.000	-.76667	.17075	-1.10847	-.42486
Equal variances not assumed			-4.490	57.832	.000	-.76667	.17075	-1.10849	-.42484	
d	3.277	.075	Equal variances assumed	.313	58	.755	.13333	.42580	-.71899	.98566
Equal variances not assumed			.313	51.915	.755	.13333	.42580	-.72112	.98779	
e	1.646	.205	Equal variances assumed	6.039	58	.000	.83333	.13799	.55711	1.10956
Equal variances not assumed			6.039	57.025	.000	.83333	.13799	.55701	1.10966	
f	14.811	.000	Equal variances assumed	-1.723	58	.090	-.50000	.29013	-1.08076	.08076
Equal variances not assumed			-1.723	41.847	.092	-.50000	.29013	-1.08557	.08557	
g	3.118	.083	Equal variances assumed	-.880	58	.383	-.16667	.18947	-.54594	.21261
Equal variances not assumed			-.880	54.838	.383	-.16667	.18947	-.54641	.21307	
i	2.024	.160	Equal variances assumed	-2.868	58	.006	-.50000	.17431	-.84891	-.15109
Equal variances not assumed			-2.868	57.979	.006	-.50000	.17431	-.84892	-.15108	
j	6.907	.011	Equal variances assumed	-4.055	58	.000	-1.10000	.27130	-1.64306	-.55694
Equal variances not assumed			-4.055	46.583	.000	-1.10000	.27130	-1.64591	-.55409	
l	.000	1.000	Equal variances assumed	.000	58	1.000	.00000	.12503	-.25027	.25027
Equal variances not assumed			.000	58.000	1.000	.00000	.12503	-.25027	.25027	
m	.539	.466	Equal variances assumed	-.222	58	.825	-.03333	.15022	-.33404	.26737
Equal variances not assumed			-.222	56.406	.825	-.03333	.15022	-.33422	.26755	