

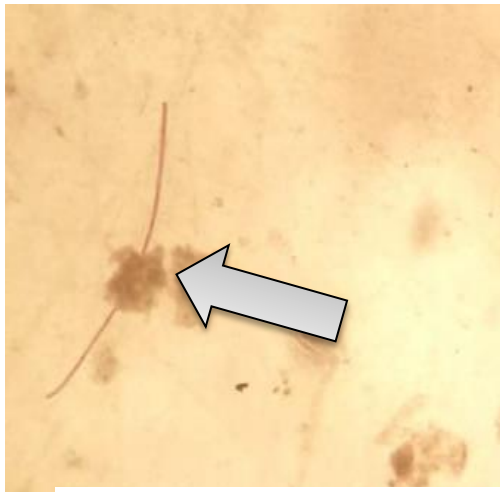
DAFTAR PUSTAKA

- Ariyanto, D.2002. Analisis Keragaman Bentuk Tubuh Ikan Nilem Strain Gif pada Tingkatan Umur yang Berbeda. *Jurnal Perikanan*, 4(1) : 19-26.
- Asriyana Rahardjo, M.F. , Kartamihardja, E.S. & Batu, D.F.L. , 2010. Makanan ikan Japuh, *Dussumieria acuta Valenciennes, 1847* (Famili : Clupeidae) Di Perairan Teluk Kendari (Food Habit of rainbow sardine, *Dussumieria acuta Valenciennes, 1847* (Famili : Clupeidae) in Kendari Bay). 10(1):2010.
- Asriansyah, A. (2008). Food habit of Sepatung (*Pristolepisgrooti*) in Musi Watershed, South Sumatera (in Indonesia). [Thesis]. Bogor: Bogor Agricultural University.
- Basmi, J. (1999). Planktonologi: Ganggang Biru – Penuntun Identifikasi. Fakultas Perikanan dan Kelautan IPB. Bogor.
- Bhagawati, D., Muh.Nadjmi Abulias dan A.Nuryanto. 2009. Penelusuran Status Species Tiga Jenis Ikan Nilem Hasil Budidaya Di Kabupaten Banyumas Berdasarkan Karakter Morfologi. Seminar Nasional "Masyarakat Taksonomi Fauna Indonesia". Bogor, 11 – 12 Nopember 2009.
- Dewi, M. 2019. Kebiasaan Makanan Ikan Nilem, di Perairan Danau Sidenreng, Kabupaten Sidenreng Rappang, Sulawesi Selatan. Skripsi. Universitas Hasanuddin. Makassar.
- Dina, R., Lukman, & G. Wahyudewantoro. 2019. Status jenis iktiofauna Danau Tempe , Sulawesi Selatan Ichthyofauna state of Lake Tempe , South Sulawesi. Hal 251–255. Prosiding Seminar Nasional Masyarakat Biodiversitas Indonesia. <https://doi.org/10.13057/psnmbi/m050218>
- Djuhanda, T. 1983. Analisa Struktur Vertebrata Jilid I. Penerbit Armico. Bandung
- Effendie, M. I. 2012. Biologi Perikanan. Yayasan Pustaka Nusantara. Yogyakarta. 163 hal.
- Elfidasari, D. , Qoyyimah, F.D. .Fahmi, M..R. & Puspitasari, R.L. 2016. Variasi Ikan Nilem. Berdasarkan Karakter Morfologi Di Perairan Ciliwung. *Jurnal Al-Azhar Indonesia Sains dan Teknologi*. 3 (4): 221-225.
- Hajisamae, s 2009. No Title. Tropic ecology of bottom fishes assemblage along coastel areas of Thailand. *Estarine, Coastal and Shelf Science* 82:503-514.
- Heltonika, B. 2019. Kajian Makanan dan Kaitannya dengan Reproduksi Ikan Senggaringan (*Mytus nigriceps*) di Sungai Klwing Purbalingga Jawa Tengah (Tesis). Sekolah Pasca Sarjana. Institut Pertanian Bogor. Bogor.109 hal.
- Jusmaldi, D.D. Solihin, R. Affandi, M.F. Rahardjo and R. Gustiano, 2019. Reproductive biology of silurid catfishes *Ompok miostoma* (Vaillant 1902) in Mahakam River East Kalimantan. *J. Iktiologi Indones.*, 19: 13-29.
- Karachle, P. K., & Stergiou, K. I. 2010. Intestine Morphometrics Of Fishes: A Compilation and Analysis Of Bibliographic Data. *Acta Ichthyologica Et Piscatoria*, 40(1).
- Rahardjo, A.A. & Marlioni, L. 2007. Nilem: Diolah Naik Derajat.
- Saanin, H. 1984. Taksonomi dan Kunci Identifikasi Ikan Jilid 2. Bina Cipta, Bandung
- Sawetri. (2018). Population dynamics of malayan leaf fish (*Pristolepisgrooti* Blkr .) in riau lake, south sumatera, 24(December), 125–131. Zuliani. (2016). kebiasaan makanan.

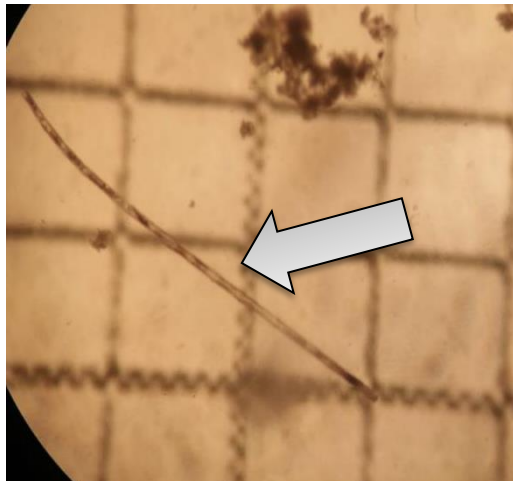
- Situmorang, T.S. Barus, T.A. & H,W. 2013. Jurnal Perikanan dan Kelautan issn 0853-7607. Studi Komparasi Jenis Makanan ikan Keperas (*Puntius Binotatus*) di Sungai Aek Pahu Tombak, Aek Pahu Hutamosu dan Sungai Parbotikan.
- Syamsuri, Purwanto, Subanji & Irawati, S. (2016). Characterization of students formal-proof construction in mathematics learning. *Communications in Science and Technology*, 1(2), 42-50.
- Syandri H. The use of *Osteochilus vittatus* and *Puntius javanicus* asa an agen of biological in Maninjau Lake. *Journal of Natur Indonesia* 2004; 6(2):87-91.
- Taofiqurohman, A. dkk. 2007. Studi Kebiasaan Makanan Ikan (food Habit) Ikan Nilem (*Osteochilus hasselti*) Di Tarogong Kabupaten Garut. Laporan Penelitian Peneliti Muda (LITMUD) UNPAD. Universitas Padjajaran. Bandung
- Utami, D. P., E. Rochima, & R. I. Pratama. 2019. Perubahan Karakteristik Ikan Nilem pada Berbagai Pengolahan Suhu Tinggi. *Jurnal Perikanan dan Kelautan*, 5(1):39– 45.
- Wakiah, A., A. Mallawa, & F. Amir. 2020. Population dynamics of snakehead fish (*Channa striata*) in the Lake Tempe , South Sulawesi , Indonesia,13(5):3015–3027. <http://bioflux.com.ro/aacI>

LAMPIRAN

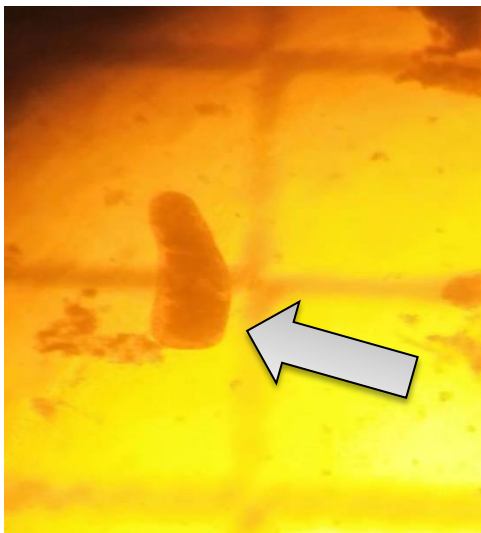
Lampiran 1. Jenis makanan yang ditemukan pada usus ikan nilam, *Osteochilus vittatus* (Valenciennes 1842)



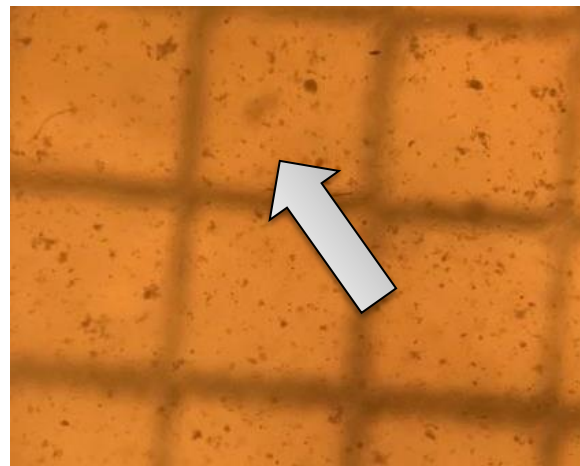
Oscillatoria limnetica



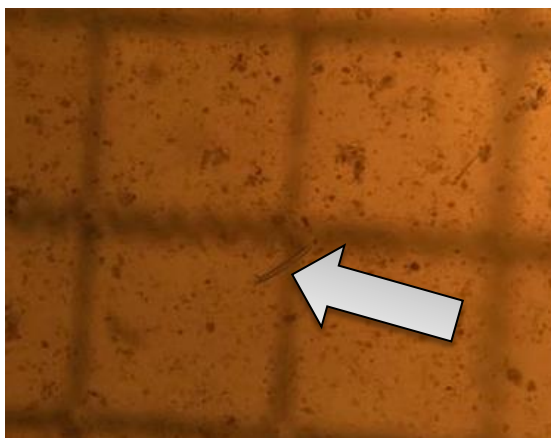
Aphanizomenon flos-aquae



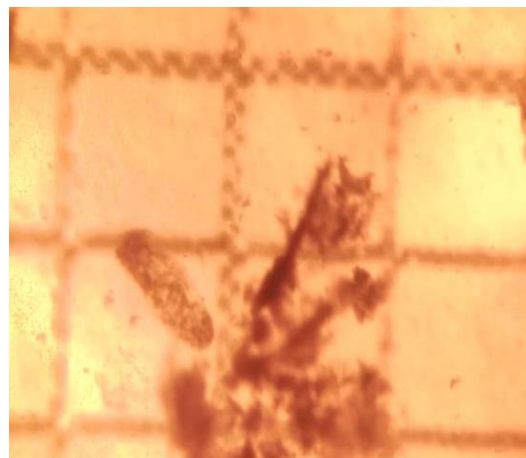
Trachychloron circular



Melosira granulata



Gleotila pelagica



Diatoma vulgare

Lampiran 1. Lanjut

Lampiran 2. Klasifikasi spesies plankton yang ditemukan pada usus ikan nilam,
Osteochilus vittatus, (Valenciennes, 1842)

Empire	: Eukaryota	Kingdom	: Eubacteria
Kingdom	: Chromista	Phylum	: Cyanobacteria
Phylum	: Bacillariophyta	Class	: Cyanophyceae
Class	: Bacillariophyceae	Order	: Oscillatoriales
Order	: Bacillariales	Family	: Oscillatoriaceae
Family	: Baccilariaceae	Genus	: <i>Oscillatoria</i>
Genus	: <i>Nitzschia</i>	Spesies	: <i>O. limnetica</i>
Spesies	: <i>N.sigmoidea</i>		

Empire	: Eukaryota	Empire	: Eukaryota
Kingdom	: Plantae	Kingdom	: Chromista
Phylum	: Chlorophyta	Phylum	: Bacillariophyta
Class	: Trebouxiophyceae	Class	: Coscinodiscophyceae
Order	: Chlorellales	Order	: Melosirales
Family	: Chlorellaceae	Family	: Melosiraceae
Genus	: <i>Gloeotila</i>	Genus	: <i>Melosira</i>
Spesies	: <i>Gloeotila pelagica</i>	Spesies	: <i>Melosira granulata</i>

Empire	: Eukaryota	Empire	: Eukaryota
Kingdom	: Plantae	Kingdom	: Chromista
Phylum	: Chlorophyta	Phylum	: Bacillariophyta
Class	: Trebouxiophyceae	Class	: Coscinodiscophyceae
Order	: Prasiolales	Order	: Bacillariales
Family	: Koliellaceae	Family	: Aphanizomenonaceae
Genus	: <i>Koliella</i>	Genus	: <i>Aphanizomenon</i>
Spesies	: <i>Koliella longiseta</i>	Spesies	: <i>A. flos-aquae</i>

Lampiran 2. Lanjutan

Empire : Eukaryota
Kingdom : Chromista
Phylum : Bacillariophyta
Class : Fragilariophyceae
Order : Fragilariales
Family : Flagilariaceae
Genus : *Diatoma*
Spesies : *Diatoma vulgare*

Empire : Eukaryota
Kingdom : Chromista
Phylum : Chlorophyceae
Class : Xanthophyceae
Order : Xanthophytes
Family : Pleurochloridaceae
Genus : *Trachychloron*
Spesies : *Trachychloron sp.*

Lampiran 3. Hasil analisis Indeks Bagian Terbesar (%) jenis makanan ikan nilem, *Osteochilus vittatus*, (Valenciennes, 1842) bulan Juli 2022

No	Kelas	Vi	Oi	Vi*Oi	IBT
1	Bacillariophcea	26.6667	3.3333	88.8889	52.8855
2	Coscinodiscophyceae	0.0333	1.6667	2.2222	11,6288
3	Cyanophyceae	0.619	4.3333	0.0322	8,0346
4	Fragilariophyceae	0.0400	0.4100	2.2400	0,7673
5	Xanthophyceae	0.1200	0.6667	0.3333	0,0949
		100	100	744	100

Lampiran 4. Hasil analisis Indeks Bagian Terbesar (%) jenis makanan ikan nilem, *Osteochilus vittatus*, (Valenciennes, 1842) bulan Agustus 2022

No	Kelas	Vi	Oi	Vi*Oi	IBT
1	Bacillariophyceae	3.1414	6.2500	24.4155	71.6288
2	Chlorophyceae	0.5236	2.0833	1.0908	7.0246
3	Coscinodiscophyceae	2.6178	.1667	0.9075	5.4982
4	Cyanophyceae	1.2565	4.1667	1.0628	0.4712
6	Trebouxiophyceae	32.4607	33.3333	1.0244	0.3247
		100	100	4432	100

Lampiran 5. Hasil analisis Indeks Bagian Terbesar (%) jenis makanan ikan nilem, *Osteochilus vittatus*, (Valenciennes, 1842) bulan September 2022

No	Kelas	Vi	Oi	Vi*Oi	IBT
1	Bacillariophcea	26.6667	3.3333	88.8889	73,6321
2	Chlorophyceae	0.0333	1.6667	2.2222	6,7214
3	Coscinodiscophyceae	0.619	4.3333	0.0322	0,9468
4	Cyanophyceae	0.0400	0.4100	2.2400	6,3547
5	Fragilariophyceae	0.1200	0.6667	0.3333	0,0155
6	Trebouxiophyceae	0,7673	0.0656	0.0021	0,9468
7	Xanthophyceae	0,0949	0.0551	1.1110	1,6321
		100	100	744	100

Lampiran 6 Uji t-test (*Two-Sample Assuming Equal Variances*) indeks bagian terbesar berdasarkan waktu pengambilan sampel ikan nilem *Osteochilus vittatus*, (Valenciennes, 1842) jantan dan betina

Bulan Juli

	IBT Betina	IBT Jantan
Mean	9.0020	9.0020
Variance	105.5016	1287.1463
Observations	9	9
Pooled Variance	1168.8239	
Hypothesized Mean Difference	0	
Df	18	
t Stat	1.6430	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.8595	
P(T<=t) two-tail	1	
t Critical two-tail	2.3060	

Bulan Agustus

	IBT Betina	IBT Jantan
Mean	9.0020	9.0020
Variance	405.9016	587.2363
Observations	9	9
Pooled Variance	5168.8231	
Hypothesized Mean Difference	0	
Df	18	
t Stat	1.6430	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.8595	
P(T<=t) two-tail	1	
t Critical two-tail	2.3060	

Bulan September

	IBT Betina	IBT Jantan
Mean	9.0020	9.0020
Variance	305.8016	327.1463
Observations	9	9
Pooled Variance	5168.8739	
Hypothesized Mean Difference	0	
Df	18	
t Stat	1.6430E-16	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.8595	
P(T<=t) two-tail	1	
t Critical two-tail	2.3060	

Lampiran 7. Indeks Bagian Terbesar (%) jenis makanan ikan nilem, *Osteochilus vittatus* (Valenciennes, 1842) jantan yang berukuran kecil (123-154)

No	Kelas	Vi	Oi	Vi*Oi	IBT
1	Bacillariophyceae	2.3622	1.51515	3.5791	78.0865
3	Coscinodiscophyceae	5.51181	9.09091	50.1074	5,6814
4	Cyanophyceae	55.1181	48.4848	2672.3932	1.6225
2	Fragilariophyceae	0.7874	1.51515	1.1930	3.4397
5	Trebouxiophyceae	33.8583	37.8788	1282.5101	0.9276
6	Xanthophyceae	2.3622	1.51515	3.5791	0.2213
		100	100	4013.3620	100

Lampiran 8. Indeks Bagian Terbesar (%) jenis makanan ikan nilem, *Osteochilus vittatus* (Valenciennes, 1842) jantan yang berukuran sedang (154-184)

No	Kelas	Vi	Oi	Vi*Oi	IBT
1	Bacillariophyceae	0.89286	1.75439	1.5664	64.1287
3	Coscinodiscophyceae	0.89286	1.75439	1.5664	3.2574
4	Cyanophyceae	66.9643	63.1579	4229.3233	14.0026
5	Trebouxiophyceae	31.25	33.3333	1041.6667	0.2252
		100	100	5274.1228	100

Lampiran 9. Indeks Bagian Terbesar (%) jenis makanan ikan nilem, *Osteochilus vittatus* (Valenciennes, 1842) jantan yang berukuran besar (184-1225)

No	Kelas	Vi	Oi	Vi*Oi	IBT
1	Bacillariophyceae	0.89286	1.75439	1.5664	70.4554
3	Coscinodiscophyceae	0.89286	1.75439	1.5664	11.3497
4	Cyanophyceae	66.9643	63.1579	4229.3233	4.3533
5	Trebouxiophyceae	31.25	33.3333	1041.6667	0.0221
		100	100	5274.1228	100

Lampiran 10. Uji t-test (*Two-Sample Assuming Equal Variances*) indeks bagian terbesar berdasarkan ukuran panjang total tubuh ikan *Osteochilus vittatus*, (Valenciennes, 1842) jantan dan betina

Indeks Bagian Terbesar Ikan Kecil

	IBT Betina	IBT Jantan
Mean	9.0020	9.0020
Variance	145.6016	627.1460
Observations	9	9
Pooled Variance	5168.8239	
Hypothesized Mean Difference	0	
Df	18	
t Stat	1.6410E-16	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.8595	
P(T<=t) two-tail	1	
t Critical two-tail	2.3060	

Indeks Bagian Terbesar Ikan Sedang

	IBT Betina	IBT Jantan
Mean	9.0020	9.0020
Variance	215.5016	287.1463
Observations	9	9
Pooled Variance	2168.8239	
Hypothesized Mean Difference	0	
Df	18	
t Stat	-1,8753E-16	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.8595	
P(T<=t) two-tail	1	
t Critical two-tail	2.3060	

Indeks Bagian Terbesar Ikan Besar

	IBT Betina	IBT Jantan
Mean	9.0020	9.0020
Variance	305.5016	5287.1463
Observations	9	9
Pooled Variance	5168.8239	
Hypothesized Mean Difference	0	
Df	18	
t Stat	-1.2430E16	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.8595	
P(T<=t) two-tail	1	
t Critical two-tail	2.3060	

Lampiran 11. Uji t-test (*Two-Sample Assuming Equal Variances*) Panjang Relatif Usus berdasarkan waktu pengamatan ikan nilem *Osteochilus vittatus*, (Valenciennes, 1842) jantan dan betina

Bulan Juli 2022

	RLG Betina	RLG Jantan
Mean	9.0020	9.0020
Variance	305.4016	1187.1463
Observations	9	9
Pooled Variance	1168.8239	
Hypothesized Mean Difference	0	
Df	18	
t Stat	1.74301	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.8595	
P(T<=t) two-tail	1	
t Critical two-tail	2.3060	

Bulan Agustus 2022

	<i>RLG Betina</i>	<i>RLG Jantan</i>
Mean	9.0020	9.0020
Variance	605.2056	287.1493
Observations	9	9
Pooled Variance	1168.8239	
Hypothesized Mean Difference	0	
Df	18	
t Stat	1.8430	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.8595	
P(T<=t) two-tail	1	
t Critical two-tail	2.3060	

Bulan September 2022

	<i>RLG Betina</i>	<i>RLG Jantan</i>
Mean	9.0020	9.0020
Variance	490.5596	787.1463
Observations	9	9
Pooled Variance	416.8239	
Hypothesized Mean Difference	0	
Df	18	
t Stat	1.6230	
P(T<=t) one-tail	0.5	
t Critical one-tail	1.7595	
P(T<=t) two-tail	1	
t Critical two-tail	2.3060	