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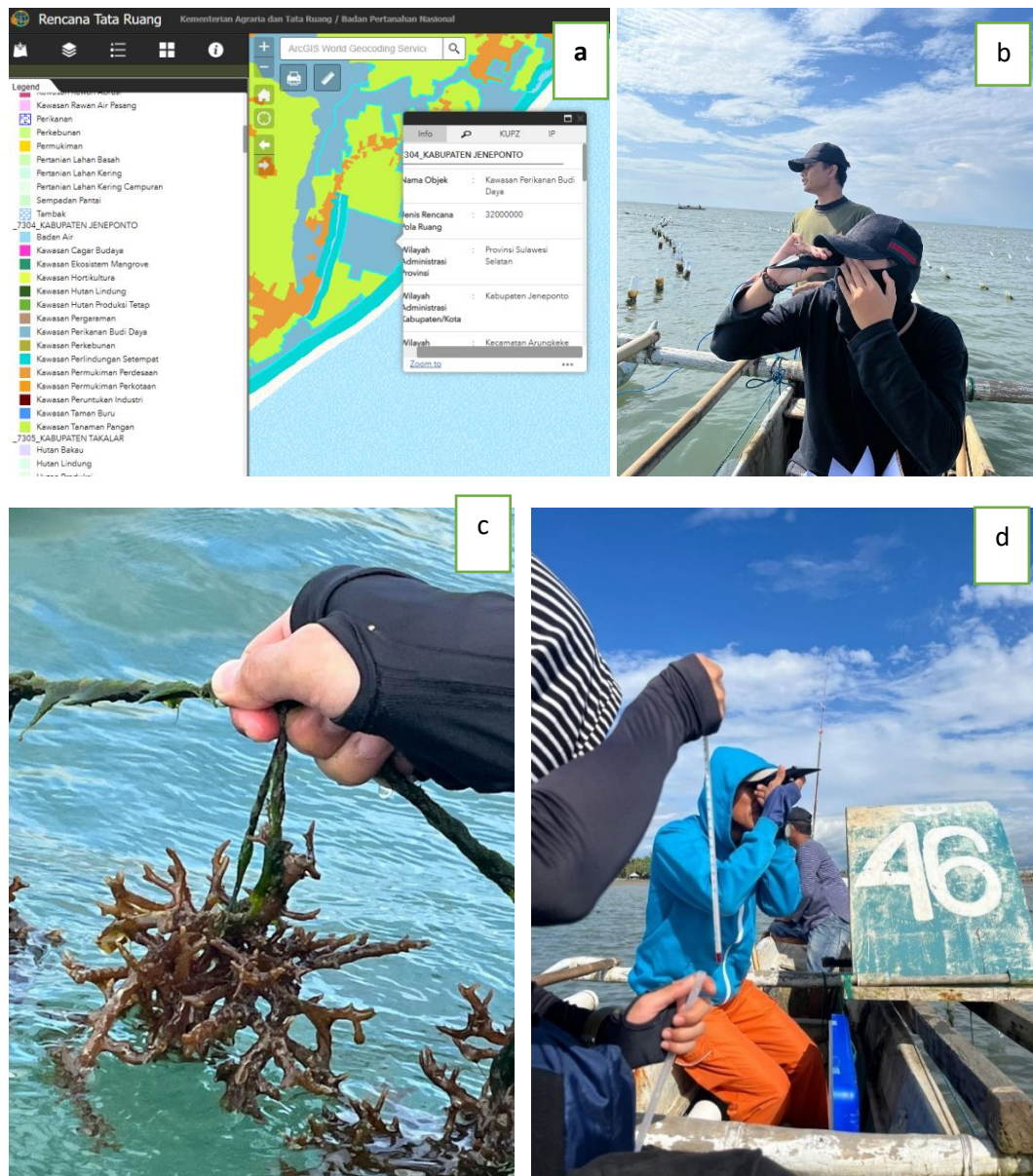
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LAMPIRAN

Lampiran 1. Dokumentasi Kegiatan di Lapangan



Gambar 39. (a) RTRW Perairan Arungkekek, (b) Pengambilan parameter oseanografi (c) dokumentasi rumput laut di lokasi penelitian (d) Pengambilan parameter oseanografi

Lampiran 2. Dokumentasi Rumput Laut dan Epifit

Gambar 40. Dokumentasi rumput laut yang terserang epifit

Lampiran 3. Dokumentasi di Laboratorium



Gambar 41. Dokumentasi di Laboratorium

Lampiran 4. Data Kualitas air

| Stasiun | Ulangan | Suhu | Salinitas | Ph | Arus | Bot | Tss | Kekeruhan | Nitrat | Amonia | Fosfat |
|-----------|---------|-------|-----------|------|-------|--------|--------|-----------|--------|--------|--------|
| Stasiun 1 | 1 | 30 | 27.00 | 7.6 | 0.109 | 45.504 | 43.478 | 16.13 | 0.063 | 0.305 | 0.018 |
| Stasiun 1 | 2 | 30.67 | 28.00 | 7.59 | 0.101 | 26.544 | 42.254 | 16.99 | 0.059 | 0.273 | 0.034 |
| Stasiun 1 | 3 | 30.67 | 28.00 | 7.6 | 0.102 | 27.808 | 48.866 | 13.97 | 0.064 | 0.378 | 0.019 |
| Stasiun 1 | 4 | 31.00 | 27.00 | 7.57 | 0.107 | 35.392 | 37.607 | 9.56 | 0.031 | 0.244 | 0.015 |
| Stasiun 1 | 5 | 30.67 | 27.00 | 7.58 | 0.09 | 29.704 | 29.210 | 7.10 | 0.032 | 0.341 | 0.027 |
| Stasiun 2 | 1 | 30.33 | 28.33 | 7.57 | 0.082 | 29.704 | 49.153 | 11.87 | 0.042 | 0.256 | 0.029 |
| Stasiun 2 | 2 | 30.33 | 28.00 | 7.57 | 0.078 | 46.136 | 22.491 | 4.24 | 0.044 | 0.691 | 0.021 |
| Stasiun 2 | 3 | 31.00 | 28.33 | 7.57 | 0.092 | 26.544 | 23.729 | 4.06 | 0.041 | 0.224 | 0.019 |
| Stasiun 2 | 4 | 30.67 | 28.00 | 7.58 | 0.09 | 18.328 | 25.862 | 6.27 | 0.055 | 0.264 | 0.028 |
| Stasiun 2 | 5 | 31.00 | 28.00 | 7.55 | 0.088 | 30.336 | 24.779 | 7.66 | 0.018 | 0.275 | 0.018 |
| Stasiun 3 | 1 | 31.00 | 28.00 | 7.58 | 0.086 | 22.120 | 40.336 | 7.61 | 0.043 | 0.277 | 0.027 |
| Stasiun 3 | 2 | 30.67 | 29.00 | 7.6 | 0.07 | 20.856 | 18.900 | 0.44 | 0.040 | 0.249 | 0.019 |
| Stasiun 3 | 3 | 31.00 | 28.00 | 7.61 | 0.086 | 25.912 | 23.529 | 2.03 | 0.033 | 0.281 | 0.026 |
| Stasiun 3 | 4 | 30.33 | 30.00 | 7.58 | 0.095 | 34.128 | 23.411 | 2.37 | 0.022 | 0.329 | 0.012 |
| Stasiun 3 | 5 | 31.00 | 28.00 | 7.59 | 0.08 | 8.848 | 20.690 | 2.75 | 0.018 | 0.227 | 0.018 |

Lampiran 5. Data Prevelensi Epifit

| | | Bobot <i>Chaetomorpha</i> <i>Sp</i> | Bobot <i>Hypnea</i> <i>Sp</i> | Total Bobot Epifit | Rata-Rata Bobot Epifit | Bobot Rumpun Laut | Bobot Rumpun | Rata-Rata Epifit |
|-----------|----|---|----------------------------------|-----------------------|---------------------------|----------------------|-----------------|---------------------|
| Stasiun 1 | S1 | 7.91 | 26.00 | 33.91 | 16.95 | 66.09 | 215 | 10.42 |
| | s2 | 5.83 | 6.67 | 12.50 | 6.25 | 87.50 | 120 | |
| | S3 | 13.60 | 0.00 | 13.60 | 6.80 | 86.40 | 125 | |
| | S4 | 6.36 | 35.34 | 41.70 | 20.85 | 58.30 | 220 | |
| | S5 | 2.54 | 0.00 | 2.54 | 1.27 | 97.46 | 197 | |
| Stasiun 2 | S1 | 4.94 | 0.00 | 4.94 | 2.47 | 95.06 | 162 | 5.67 |
| | s2 | 1.63 | 21.47 | 23.11 | 11.55 | 76.89 | 245 | |
| | S3 | 7.76 | 0.00 | 7.76 | 3.88 | 92.24 | 232 | |
| | S4 | 14.50 | 6.42 | 20.92 | 10.46 | 79.08 | 200 | |
| | S5 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 215 | |
| Stasiun 3 | S1 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 217 | 2.65 |
| | s2 | 5.83 | 0.00 | 5.83 | 2.92 | 94.17 | 120 | |
| | S3 | 4.44 | 0.00 | 4.44 | 2.22 | 95.56 | 180 | |
| | S4 | 6.25 | 0.00 | 6.25 | 3.13 | 93.75 | 160 | |
| | S5 | 10.00 | 0.00 | 10.00 | 5.00 | 90.00 | 170 | |

Lampiran 6. Data Kualitas rumput laut (Kadar Abu Rumput Laut)

| Stasiun | Titik | Berat Cawan Kosong | Berat Cawan Awal Berisi Rumput Laut | Berat Akhir Sampel | Berat Awal Sampel (D) | Berat Akhir Sampel | Selisih | Selisih/Berat Sampel | Kadar Abu | Rata-Rata |
|---------|-------|--------------------|-------------------------------------|--------------------|-----------------------|--------------------|---------|----------------------|-----------|-----------|
| 1 | 1.1 | 29.452 | 31.285 | 29.774 | 1.833 | 1.511 | 0.3220 | 0.1757 | 17.567 | 17.389 |
| | 1.2 | 22.780 | 24.114 | 22.91 | 1.334 | 1.204 | 0.1300 | 0.0975 | 9.745 | |
| | 1.3 | 25.127 | 26.198 | 25.217 | 1.071 | 0.981 | 0.0900 | 0.0840 | 8.403 | |
| | 1.4 | 25.234 | 26.346 | 25.309 | 1.112 | 1.037 | 0.0750 | 0.0674 | 6.745 | |
| | 1.5 | 26.225 | 27.54 | 26.81 | 1.315 | 0.73 | 0.5850 | 0.4449 | 44.487 | |
| 2 | 2.1 | 29.310 | 30.393 | 29.391 | 1.083 | 1.002 | 0.0810 | 0.0748 | 7.479 | 7.361 |
| | 2.2 | 27.251 | 28.228 | 27.275 | 0.977 | 0.953 | 0.0240 | 0.0246 | 2.456 | |
| | 2.3 | 25.325 | 26.631 | 25.433 | 1.306 | 1.198 | 0.1080 | 0.0827 | 8.270 | |
| | 2.4 | 29.306 | 30.636 | 29.425 | 1.330 | 1.211 | 0.1190 | 0.0895 | 8.947 | |
| | 2.5 | 30.000 | 30.974 | 30.094 | 0.974 | 0.88 | 0.0940 | 0.0965 | 9.651 | |
| 3 | 3.1 | 27.341 | 28.533 | 27.415 | 1.192 | 1.118 | 0.0740 | 0.0621 | 6.208 | 8.662 |
| | 3.2 | 16.814 | 17.882 | 16.925 | 1.068 | 0.957 | 0.1110 | 0.1039 | 10.393 | |
| | 3.3 | 28.763 | 29.999 | 28.876 | 1.236 | 1.123 | 0.1130 | 0.0914 | 9.142 | |
| | 3.4 | 25.437 | 26.726 | 25.553 | 1.289 | 1.173 | 0.1160 | 0.0900 | 8.999 | |
| | 3.5 | 25.705 | 26.744 | 25.794 | 1.039 | 0.95 | 0.0890 | 0.0857 | 8.566 | |

Lanjutan (Kadar Air Rumput Laut)

| Stasiun | Titik | Berat Awal Sampel | Berat Akhir Sampel | B Akhir -B. Awal | Hasil/Berat Awal | Kadar Air (%) | Rata-Rata |
|---------|-------|-------------------|--------------------|------------------|------------------|---------------|-----------|
| 1 | 1.1 | 1.076 | 0.9570 | 0.1190 | 0.1106 | 11.06 | 10.06 |
| | 1.2 | 1.036 | 0.9410 | 0.0950 | 0.0917 | 9.17 | |
| | 1.3 | 1.054 | 0.9260 | 0.1280 | 0.1214 | 12.14 | |
| | 1.4 | 1.025 | 0.9270 | 0.0980 | 0.0956 | 9.56 | |
| | 1.5 | 1.062 | 0.9730 | 0.0890 | 0.0838 | 8.38 | |
| 2 | 2.1 | 1.099 | 0.9520 | 0.1470 | 0.1338 | 13.38 | 12.52 |
| | 2.2 | 1.078 | 0.9530 | 0.1250 | 0.1160 | 11.60 | |
| | 2.3 | 1.054 | 0.9130 | 0.1410 | 0.1338 | 13.38 | |
| | 2.4 | 1.048 | 0.9350 | 0.1130 | 0.1078 | 10.78 | |
| | 2.5 | 1.045 | 0.9040 | 0.1410 | 0.1349 | 13.49 | |
| 3 | 3.1 | 1.03 | 0.8040 | 0.2260 | 0.2194 | 21.94 | 14.58 |
| | 3.2 | 1.057 | 0.9450 | 0.1120 | 0.1060 | 10.60 | |
| | 3.3 | 1.099 | 0.9530 | 0.1460 | 0.1328 | 13.28 | |
| | 3.4 | 1.015 | 0.8830 | 0.1320 | 0.1300 | 13.00 | |
| | 3.5 | 1.057 | 0.9080 | 0.1490 | 0.1410 | 14.10 | |

Lampiran 7. Kadar Karagenan Rumput laut



**LABORATORIUM PRODUKTIVITAS & KUALITAS PERAIRAN
FAKULTAS ILMU KELAUTAN DAN PERIKANAN
UNIVERSITAS HASANUDDIN**

Jl. Perintis Kemerdekaan, KM 10 Tamalanrea, Makassar, Indonesia 90245
Telp./ Fax. +62-0411-386025, email : fkip@unhas.ac.id, website :http://fkip.unhas.ac.id

No : 06.UM/Lab.Air/III/2023
 Pemilik sampel : Fajriansyah Nadir
 Tanggal terima sampel : 8 Maret 2023
 Jumlah sampel : 9
 Jenis sampel : Rumput laut
 Asal sampel : Kab. Jeneponto

DATA HASIL ANALISIS

| No | Kode Sampel | Parameter Uji | |
|----|-------------|---------------------|-------------------|
| | | Kadar Karaginan (%) | Kekuatan Gel (gr) |
| 1 | S1-2 | 53,72 | 2,6750 |
| 2 | S1-3 | 59,68 | 2,6667 |
| 3 | S1-5,4 | 43,78 | 2,6670 |
| 4 | S2-1 | 50,17 | 2,6081 |
| 5 | S2-2,5 | 51,24 | 2,6656 |
| 6 | S2-3,5 | 51,07 | 2,6667 |
| 7 | S2-3,5 | 51,35 | 2,6650 |
| 8 | S3-3 | 52,51 | 2,6663 |
| 9 | S3-5 | 50,78 | 2,6671 |

Pranata Lab. Pendidikan (PLP)



Fitriyani, S.Gi., M.K.M
Nip: 19771012 200112 2 001

Makassar, 3 April 2023

Ketua Lab.



Dr. Ir. Badraeni, MP
NIP: 19651023 199103 2 001

Lampiran 8. Kadar Klorofil A dan Karotenoid Rumpuk Laut

| Stasiun | Titik | A663 | A645 | 12.7 | 2.69 | 12.7*A663 | 2.69*A645 | Volume | B. Thallus | Klorofil A | Rata-rata |
|---------|-------|-------|-------|------|------|-----------|-----------|--------|------------|------------|-----------|
| 1 | 1.1 | 0.041 | 0.007 | 12.7 | 2.69 | 0.521 | 0.019 | 15 | 0.957 | 0.0008 | 0.0021 |
| | 1.2 | 0.081 | 0.012 | 12.7 | 2.69 | 1.029 | 0.032 | 15 | 0.941 | 0.0016 | |
| | 1.3 | 0.138 | 0.021 | 12.7 | 2.69 | 1.753 | 0.056 | 15 | 0.926 | 0.0027 | |
| | 1.4 | 0.142 | 0.021 | 12.7 | 2.69 | 1.803 | 0.056 | 15 | 0.927 | 0.0028 | |
| | 1.5 | 0.121 | 0.02 | 12.7 | 2.69 | 1.537 | 0.054 | 15 | 0.873 | 0.0025 | |
| 2 | 2.1 | 0.154 | 0.02 | 12.7 | 2.69 | 1.956 | 0.054 | 15 | 0.952 | 0.0030 | 0.0055 |
| | 2.2 | 0.425 | 0.094 | 12.7 | 2.69 | 5.398 | 0.253 | 15 | 0.953 | 0.0081 | |
| | 2.3 | 0.28 | 0.066 | 12.7 | 2.69 | 3.556 | 0.178 | 15 | 0.913 | 0.0056 | |
| | 2.4 | 0.473 | 0.083 | 12.7 | 2.69 | 6.007 | 0.223 | 15 | 0.935 | 0.0093 | |
| | 2.5 | 0.07 | 0.009 | 12.7 | 2.69 | 0.889 | 0.024 | 15 | 0.904 | 0.0014 | |
| 3 | 3.1 | 0.197 | 0.049 | 12.7 | 2.69 | 2.502 | 0.132 | 15 | 0.804 | 0.0044 | 0.0056 |
| | 3.2 | 0.337 | 0.066 | 12.7 | 2.69 | 4.280 | 0.178 | 15 | 0.945 | 0.0065 | |
| | 3.3 | 0.141 | 0.017 | 12.7 | 2.69 | 1.791 | 0.046 | 15 | 0.953 | 0.0027 | |
| | 3.4 | 0.595 | 0.117 | 12.7 | 2.69 | 7.557 | 0.315 | 15 | 0.883 | 0.0123 | |
| | 3.5 | 0.09 | 0.008 | 12.7 | 2.69 | 1.143 | 0.022 | 15 | 0.908 | 0.0019 | |

Lanjutan (Kadar Karotenoid Rumput Laut)

| STASIUN | TITIK | A663 | A645 | A480 | 0.114 | 0.638 | 0.114 * A663 | 0.638 * A645 | KAROTENOID | Rata-rata |
|---------|-------|-------|-------|-------|-------|-------|--------------|-----------------|------------|-----------|
| 1 | 1.1 | 0.041 | 0.007 | 0.01 | 0.114 | 0.638 | 0.0047 | 0.0045 | 0.0102 | 0.0208 |
| | 1.2 | 0.081 | 0.012 | 0.015 | 0.114 | 0.638 | 0.0092 | 0.0077 | 0.0166 | |
| | 1.3 | 0.138 | 0.021 | 0.018 | 0.114 | 0.638 | 0.0157 | 0.0134 | 0.0203 | |
| | 1.4 | 0.142 | 0.021 | 0.014 | 0.114 | 0.638 | 0.0162 | 0.0134 | 0.0168 | |
| | 1.5 | 0.121 | 0.02 | 0.039 | 0.114 | 0.638 | 0.0138 | 0.0128 | 0.0400 | |
| 2 | 2.1 | 0.154 | 0.02 | 0.028 | 0.114 | 0.638 | 0.0176 | 0.0128 | 0.0328 | 0.0489 |
| | 2.2 | 0.425 | 0.094 | 0.103 | 0.114 | 0.638 | 0.0485 | 0.0600 | 0.0915 | |
| | 2.3 | 0.28 | 0.066 | 0.045 | 0.114 | 0.638 | 0.0319 | 0.0421 | 0.0348 | |
| | 2.4 | 0.473 | 0.083 | 0.075 | 0.114 | 0.638 | 0.0539 | 0.0530 | 0.0760 | |
| | 2.5 | 0.07 | 0.009 | 0.007 | 0.114 | 0.638 | 0.0080 | 0.0057 | 0.0092 | |
| 3 | 3.1 | 0.197 | 0.049 | 0.046 | 0.114 | 0.638 | 0.0225 | 0.0313 | 0.0372 | 0.0482 |
| | 3.2 | 0.337 | 0.066 | 0.062 | 0.114 | 0.638 | 0.0384 | 0.0421 | 0.0583 | |
| | 3.3 | 0.141 | 0.017 | 0.011 | 0.114 | 0.638 | 0.0161 | 0.0108 | 0.0162 | |
| | 3.4 | 0.595 | 0.117 | 0.115 | 0.114 | 0.638 | 0.0678 | 0.0746 | 0.1082 | |
| | 3.5 | 0.09 | 0.008 | 0.016 | 0.114 | 0.638 | 0.0103 | 0.0051 | 0.0212 | |

Lampiran 9. Hasil Uji One Way Anova dan Korelasi Pearson

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|---|---------|---------|---------|----------------|
| Stasiun_Karagenan | 9 | 1 | 3 | 2.00 | .866 |
| Karagenan | 9 | 43.78 | 59.68 | 51.5889 | 4.10717 |
| Valid N (listwise) | 9 | | | | |

Jika sig > 0,05 Maka distribusi normal

Jika sig < 0,05 maka tidak normal

Test of Homogeneity of Variances

| | | Levene | df1 | df2 | Sig. |
|-----------|---|-----------|-----|-------|------|
| | | Statistic | | | |
| Karagenan | Based on Mean | 5.325 | 2 | 6 | .047 |
| | Based on Median | 2.743 | 2 | 6 | .143 |
| | Based on Median and with adjusted df | 2.743 | 2 | 2.091 | .260 |
| | Based on trimmed mean | 5.134 | 2 | 6 | .050 |

Jika > 0,05 maka homogen

Jika < 0,05 maka tidak homogen

ANOVA

Karagenan

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | 3.690 | 2 | 1.845 | .084 | .920 |
| Within Groups | 131.261 | 6 | 21.877 | | |
| Total | 134.950 | 8 | | | |

Jika > 0,05 tidak berbeda nyata

Uji One Way Anova Kualitas Air

| | Stasiun | Tests of Normality | | | Shapiro-Wilk | | |
|-----------|-----------|---------------------------------|----|-------|--------------|----|------|
| | | Kolmogorov-Smirnov ^a | | | Statistic | df | Sig. |
| | | Statistic | df | Sig. | Statistic | df | Sig. |
| Suhu | Stasiun_1 | .374 | 5 | .021 | .826 | 5 | .130 |
| | Stasiun_2 | .242 | 5 | .200* | .821 | 5 | .118 |
| | Stasiun_3 | .348 | 5 | .047 | .770 | 5 | .045 |
| Salinitas | Stasiun_1 | .350 | 5 | .045 | .777 | 5 | .052 |
| | Stasiun_2 | .367 | 5 | .026 | .684 | 5 | .006 |
| | Stasiun_3 | .349 | 5 | .046 | .771 | 5 | .046 |
| PH | Stasiun_1 | .221 | 5 | .200* | .902 | 5 | .421 |
| | Stasiun_2 | .372 | 5 | .022 | .828 | 5 | .135 |
| | Stasiun_3 | .221 | 5 | .200* | .902 | 5 | .421 |
| Arus | Stasiun_1 | .257 | 5 | .200* | .906 | 5 | .442 |
| | Stasiun_2 | .234 | 5 | .200* | .928 | 5 | .585 |
| | Stasiun_3 | .211 | 5 | .200* | .962 | 5 | .822 |
| BOT | Stasiun_1 | .264 | 5 | .200* | .862 | 5 | .236 |
| | Stasiun_2 | .295 | 5 | .179 | .921 | 5 | .537 |
| | Stasiun_3 | .234 | 5 | .200* | .967 | 5 | .854 |
| TSS | Stasiun_1 | .205 | 5 | .200* | .964 | 5 | .836 |
| | Stasiun_2 | .417 | 5 | .005 | .660 | 5 | .003 |
| | Stasiun_3 | .385 | 5 | .015 | .756 | 5 | .034 |
| Kekeruhan | Stasiun_1 | .212 | 5 | .200* | .912 | 5 | .480 |
| | Stasiun_2 | .196 | 5 | .200* | .887 | 5 | .345 |
| | Stasiun_3 | .343 | 5 | .055 | .836 | 5 | .153 |
| Nitrat | Stasiun_1 | .308 | 5 | .137 | .765 | 5 | .041 |
| | Stasiun_2 | .330 | 5 | .080 | .878 | 5 | .300 |
| | Stasiun_3 | .200 | 5 | .200* | .918 | 5 | .514 |
| Amonia | Stasiun_1 | .146 | 5 | .200* | .983 | 5 | .949 |
| | Stasiun_2 | .434 | 5 | .003 | .645 | 5 | .002 |
| | Stasiun_3 | .213 | 5 | .200* | .965 | 5 | .845 |
| Fosfat | Stasiun_1 | .279 | 5 | .200* | .908 | 5 | .457 |
| | Stasiun_2 | .251 | 5 | .200* | .848 | 5 | .190 |
| | Stasiun_3 | .217 | 5 | .200* | .924 | 5 | .559 |

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

a. Lilliefors Significance Correction

Jika sig > 0,05 Maka distribusi normal dan Jika sig < 0,05 maka tidak normal.

Uji normalitas

Descriptives

| | | 95% Confidence Interval for | | | | | | | |
|-----------|-----------|-----------------------------|---------|----------------|------------|-------------|-------------|---------|---------|
| | | N | Mean | Std. Deviation | Std. Error | Mean | | Minimum | Maximum |
| | | | | | | Lower Bound | Upper Bound | | |
| Suhu | Stasiun_1 | 5 | 30.6020 | .36561 | .16351 | 30.1480 | 31.0560 | 30.00 | 31.00 |
| | Stasiun_2 | 5 | 30.6660 | .33501 | .14982 | 30.2500 | 31.0820 | 30.33 | 31.00 |
| | Stasiun_3 | 5 | 30.8000 | .29908 | .13375 | 30.4286 | 31.1714 | 30.33 | 31.00 |
| | Total | 15 | 30.6893 | .32110 | .08291 | 30.5115 | 30.8672 | 30.00 | 31.00 |
| Salinitas | Stasiun_1 | 5 | 27.9320 | .54651 | .24441 | 27.2534 | 28.6106 | 27.00 | 28.33 |
| | Stasiun_2 | 5 | 28.1320 | .18075 | .08083 | 27.9076 | 28.3564 | 28.00 | 28.33 |
| | Stasiun_3 | 5 | 28.6000 | .89443 | .40000 | 27.4894 | 29.7106 | 28.00 | 30.00 |
| | Total | 15 | 28.2213 | .63812 | .16476 | 27.8680 | 28.5747 | 27.00 | 30.00 |
| PH | Stasiun_1 | 5 | 7.5880 | .01304 | .00583 | 7.5718 | 7.6042 | 7.57 | 7.60 |
| | Stasiun_2 | 5 | 7.5680 | .01095 | .00490 | 7.5544 | 7.5816 | 7.55 | 7.58 |
| | Stasiun_3 | 5 | 7.5920 | .01304 | .00583 | 7.5758 | 7.6082 | 7.58 | 7.61 |
| | Total | 15 | 7.5827 | .01580 | .00408 | 7.5739 | 7.5914 | 7.55 | 7.61 |
| Arus | Stasiun_1 | 5 | .101800 | .0073959 | .0033076 | .092617 | .110983 | .0900 | .1090 |
| | Stasiun_2 | 5 | .086000 | .0058310 | .0026077 | .078760 | .093240 | .0780 | .0920 |
| | Stasiun_3 | 5 | .083400 | .0092087 | .0041183 | .071966 | .094834 | .0700 | .0950 |
| | Total | 15 | .090400 | .0109727 | .0028331 | .084324 | .096476 | .0700 | .1090 |
| BOT | Stasiun_1 | 5 | 32.9904 | 7.77129 | 3.47543 | 23.3411 | 42.6397 | 26.54 | 45.50 |
| | Stasiun_2 | 5 | 30.2096 | 10.10607 | 4.51957 | 17.6613 | 42.7579 | 18.33 | 46.14 |
| | Stasiun_3 | 5 | 22.3728 | 9.16509 | 4.09875 | 10.9928 | 33.7528 | 8.85 | 34.13 |

| | | | | | | | | | |
|---------------|-----------|----|---------|----------|----------|---------|---------|-------|-------|
| | Total | 15 | 28.5243 | 9.59626 | 2.47774 | 23.2100 | 33.8385 | 8.85 | 46.14 |
| TSS | Stasiun_1 | 5 | 40.2830 | 7.37450 | 3.29798 | 31.1263 | 49.4397 | 29.21 | 48.87 |
| | Stasiun_2 | 5 | 29.2028 | 11.22221 | 5.01873 | 15.2686 | 43.1370 | 22.49 | 49.15 |
| | Stasiun_3 | 5 | 25.3732 | 8.58737 | 3.84039 | 14.7106 | 36.0358 | 18.90 | 40.34 |
| | Total | 15 | 31.6197 | 10.74317 | 2.77388 | 25.6703 | 37.5690 | 18.90 | 49.15 |
| Kekeruha n | Stasiun_1 | 5 | 12.7500 | 4.27168 | 1.91035 | 7.4460 | 18.0540 | 7.10 | 16.99 |
| | Stasiun_2 | 5 | 6.8200 | 3.19314 | 1.42802 | 2.8552 | 10.7848 | 4.06 | 11.87 |
| | Stasiun_3 | 5 | 3.0400 | 2.70176 | 1.20826 | -.3147 | 6.3947 | .44 | 7.61 |
| | Total | 15 | 7.5367 | 5.22722 | 1.34966 | 4.6419 | 10.4314 | .44 | 16.99 |
| Nitrat | Stasiun_1 | 5 | .049800 | .0168137 | .0075193 | .028923 | .070677 | .0310 | .0640 |
| | Stasiun_2 | 5 | .040000 | .0135093 | .0060415 | .023226 | .056774 | .0180 | .0550 |
| | Stasiun_3 | 5 | .031200 | .0109407 | .0048929 | .017615 | .044785 | .0180 | .0430 |
| | Total | 15 | .040333 | .0151312 | .0039069 | .031954 | .048713 | .0180 | .0640 |
| Amonia | Stasiun_1 | 5 | .308200 | .0531949 | .0237895 | .242150 | .374250 | .2440 | .3780 |
| | Stasiun_2 | 5 | .342000 | .1960191 | .0876624 | .098610 | .585390 | .2240 | .6910 |
| | Stasiun_3 | 5 | .272600 | .0384292 | .0171860 | .224884 | .320316 | .2270 | .3290 |
| | Total | 15 | .307600 | .1143190 | .0295170 | .244292 | .370908 | .2240 | .6910 |
| Fosfat | Stasiun_1 | 5 | .022600 | .0077653 | .0034728 | .012958 | .032242 | .0150 | .0340 |
| | Stasiun_2 | 5 | .023000 | .0051478 | .0023022 | .016608 | .029392 | .0180 | .0290 |
| | Stasiun_3 | 5 | .020400 | .0061887 | .0027677 | .012716 | .028084 | .0120 | .0270 |
| | Total | 15 | .022000 | .0060945 | .0015736 | .018625 | .025375 | .0120 | .0340 |

Test of Homogeneity of Variances

| | | Levene Statistic | df1 | df2 | Sig. |
|-----------|---|---------------------|-----|--------|------|
| Suhu | Based on Mean | .040 | 2 | 12 | .961 |
| | Based on Median | .115 | 2 | 12 | .892 |
| | Based on Median and with adjusted df | .115 | 2 | 9.826 | .893 |
| | Based on trimmed mean | .052 | 2 | 12 | .949 |
| Salinitas | Based on Mean | 4.330 | 2 | 12 | .038 |
| | Based on Median | .828 | 2 | 12 | .461 |
| | Based on Median and with adjusted df | .828 | 2 | 5.973 | .482 |
| | Based on trimmed mean | 3.756 | 2 | 12 | .054 |
| PH | Based on Mean | .410 | 2 | 12 | .672 |
| | Based on Median | .444 | 2 | 12 | .651 |
| | Based on Median and with adjusted df | .444 | 2 | 11.368 | .652 |
| | Based on trimmed mean | .420 | 2 | 12 | .666 |
| Arus | Based on Mean | .291 | 2 | 12 | .753 |
| | Based on Median | .151 | 2 | 12 | .862 |
| | Based on Median and with adjusted df | .151 | 2 | 9.910 | .862 |
| | Based on trimmed mean | .287 | 2 | 12 | .756 |
| BOT | Based on Mean | .008 | 2 | 12 | .992 |
| | Based on Median | .032 | 2 | 12 | .968 |
| | Based on Median and with adjusted df | .032 | 2 | 11.718 | .968 |
| | Based on trimmed mean | .008 | 2 | 12 | .992 |
| TSS | Based on Mean | .282 | 2 | 12 | .759 |
| | Based on Median | .018 | 2 | 12 | .982 |
| | Based on Median and with adjusted df | .018 | 2 | 9.103 | .982 |
| | Based on trimmed mean | .182 | 2 | 12 | .836 |
| Kekeruhan | Based on Mean | 1.275 | 2 | 12 | .315 |
| | Based on Median | .719 | 2 | 12 | .507 |

| | | | | | |
|--------|--------------------------------------|-------|---|--------|------|
| | Based on Median and with adjusted df | .719 | 2 | 11.581 | .508 |
| | Based on trimmed mean | 1.255 | 2 | 12 | .320 |
| Nitrat | Based on Mean | 1.385 | 2 | 12 | .288 |
| | Based on Median | .318 | 2 | 12 | .733 |
| | Based on Median and with adjusted df | .318 | 2 | 8.989 | .735 |
| | Based on trimmed mean | 1.340 | 2 | 12 | .298 |
| Amonia | Based on Mean | 3.662 | 2 | 12 | .057 |
| | Based on Median | .587 | 2 | 12 | .571 |
| | Based on Median and with adjusted df | .587 | 2 | 4.332 | .595 |
| | Based on trimmed mean | 2.659 | 2 | 12 | .111 |
| Fosfat | Based on Mean | .706 | 2 | 12 | .513 |
| | Based on Median | .155 | 2 | 12 | .858 |
| | Based on Median and with adjusted df | .155 | 2 | 9.217 | .858 |
| | Based on trimmed mean | .656 | 2 | 12 | .536 |

Keterangan : Jika $> 0,05$ maka homogen

Jika $< 0,05$ maka tidak homogen

ANOVA

| | | Sum of Squares | df | Mean Square | F | Sig. |
|-----------|----------------|----------------|----|-------------|--------|-------------|
| Suhu | Between Groups | .102 | 2 | .051 | .457 | .644 |
| | Within Groups | 1.341 | 12 | .112 | | |
| | Total | 1.443 | 14 | | | |
| Salinitas | Between Groups | 1.175 | 2 | .588 | 1.558 | .250 |
| | Within Groups | 4.525 | 12 | .377 | | |
| | Total | 5.701 | 14 | | | |
| PH | Between Groups | .002 | 2 | .001 | 5.391 | .021 |
| | Within Groups | .002 | 12 | .000 | | |
| | Total | .003 | 14 | | | |
| Arus | Between Groups | .001 | 2 | .000 | 8.573 | .005 |
| | Within Groups | .001 | 12 | .000 | | |
| | Total | .002 | 14 | | | |
| BOT | Between Groups | 303.136 | 2 | 151.568 | 1.844 | .200 |
| | Within Groups | 986.098 | 12 | 82.175 | | |
| | Total | 1289.234 | 14 | | | |
| TSS | Between Groups | 599.565 | 2 | 299.782 | 3.540 | .062 |
| | Within Groups | 1016.257 | 12 | 84.688 | | |
| | Total | 1615.821 | 14 | | | |
| Kekeruhan | Between Groups | 239.562 | 2 | 119.781 | 10.054 | .003 |
| | Within Groups | 142.972 | 12 | 11.914 | | |
| | Total | 382.534 | 14 | | | |
| Nitrat | Between Groups | .001 | 2 | .000 | 2.220 | .151 |
| | Within Groups | .002 | 12 | .000 | | |
| | Total | .003 | 14 | | | |
| Amonia | Between Groups | .012 | 2 | .006 | .423 | .665 |

| | | | | | | |
|--------|----------------|------|----|------|------|-------------|
| | Within Groups | .171 | 12 | .014 | | |
| | Total | .183 | 14 | | | |
| Fosfat | Between Groups | .000 | 2 | .000 | .235 | .794 |
| | Within Groups | .001 | 12 | .000 | | |
| | Total | .001 | 14 | | | |

Keterangan :

Jika nilai signifikansi > 0,05 maka rata-rata sama

Jika nilai signifikansi <0,05 maka rata-rata berbeda

Uji One Way Anova Epifit

Tests of Normality

| | Stasiun | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|--------------------|-----------|---------------------------------|----|-------|--------------|----|------|
| | | Statistic | df | Sig. | Statistic | df | Sig. |
| Chaetomorphas p | Stasiun_1 | .236 | 5 | .200* | .940 | 5 | .666 |
| | Stasiun_2 | .166 | 5 | .200* | .941 | 5 | .671 |
| | Stasiun_3 | .202 | 5 | .200* | .966 | 5 | .851 |
| hypneasp | Stasiun_1 | .265 | 5 | .200* | .849 | 5 | .190 |
| | Stasiun_2 | .325 | 5 | .090 | .721 | 5 | .016 |
| | Stasiun_3 | . | 5 | . | . | 5 | . |

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

a. Lilliefors Significance Correction

Uji normalitas

Jika sig > 0,05 Maka distribusi normal

Jika sig <0,05 maka tidak norma

Descriptives

| | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|--------------------|-----------|----|--------|-------------------|------------|-------------------------------------|----------------|---------|---------|
| | | | | | | Lower Bound | Upper Bound | | |
| Chaetomorpha sp | Stasiun_1 | 5 | .07240 | .040661 | .018184 | .02191 | .12289 | .025 | .136 |
| | Stasiun_2 | 5 | .05760 | .057396 | .025668 | -.01367 | .12887 | .000 | .145 |
| | Stasiun_3 | 5 | .05300 | .036139 | .016162 | .00813 | .09787 | .000 | .100 |
| | Total | 15 | .06100 | .043129 | .011136 | .03712 | .08488 | .000 | .145 |
| hypneasp | Stasiun_1 | 5 | .13600 | .161414 | .072187 | -.06442 | .33642 | .000 | .353 |
| | Stasiun_2 | 5 | .05580 | .093211 | .041685 | -.05994 | .17154 | .000 | .215 |
| | Stasiun_3 | 5 | .00000 | .000000 | .000000 | .00000 | .00000 | .000 | .000 |
| | Total | 15 | .06393 | .115173 | .029737 | .00015 | .12771 | .000 | .353 |

Rata-rata epifit setiap stasiun

Uji Homogenitas

Test of Homogeneity of Variances

| | | Levene Statistic | df1 | df2 | Sig. |
|--------------------|---|---------------------|-----|--------|------|
| Chaetomorpha sp | Based on Mean | .658 | 2 | 12 | .536 |
| | Based on Median | .493 | 2 | 12 | .622 |
| | Based on Median and with adjusted df | .493 | 2 | 11.147 | .623 |
| | Based on trimmed mean | .625 | 2 | 12 | .552 |
| hypneasp | Based on Mean | 11.863 | 2 | 12 | .001 |
| | Based on Median | 2.580 | 2 | 12 | .117 |
| | Based on Median and with adjusted df | 2.580 | 2 | 7.672 | .139 |
| | Based on trimmed mean | 10.686 | 2 | 12 | .002 |

Jika $> 0,05$ maka homogen

Uji anova untuk melihat rata-rata epifit

| | | ANOVA | | | | |
|--------------------|-------------------|-------------------|----|----------------|-------|------|
| | | Sum of Squares | df | Mean Square | F | Sig. |
| Chaetomorphas p | Between Groups | .001 | 2 | .001 | .246 | .785 |
| | Within Groups | .025 | 12 | .002 | | |
| | Total | .026 | 14 | | | |
| hypneasp | Between Groups | .047 | 2 | .023 | 2.018 | .176 |
| | Within Groups | .139 | 12 | .012 | | |
| | Total | .186 | 14 | | | |

Jika Sig $> 0,05$ Maka Rata-Rata Sama

Jika Sig $< 0,05$ Maka Rata-Rata Berbeda

Sehingga : Epifit tiap stasiun rata-rata sama

Multiple Comparisons

Tukey HSD

| Dependent Variable | (I) Stasiun | (J) Stasiun | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|--------------------|-------------|-------------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | | Lower Bound | Upper Bound |
| Chaetomorpha | Stasiun_1 | Stasiun_2 | .014800 | .028876 | .867 | -.06224 | .09184 |
| | | Stasiun_3 | .019400 | .028876 | .784 | -.05764 | .09644 |
| | Stasiun_2 | Stasiun_1 | -.014800 | .028876 | .867 | -.09184 | .06224 |
| | | Stasiun_3 | .004600 | .028876 | .986 | -.07244 | .08164 |
| | Stasiun_3 | Stasiun_1 | -.019400 | .028876 | .784 | -.09644 | .05764 |
| | | Stasiun_2 | -.004600 | .028876 | .986 | -.08164 | .07244 |
| hypneasp | Stasiun_1 | Stasiun_2 | .080200 | .068061 | .488 | -.10138 | .26178 |
| | | Stasiun_3 | .136000 | .068061 | .155 | -.04558 | .31758 |
| | Stasiun_2 | Stasiun_1 | -.080200 | .068061 | .488 | -.26178 | .10138 |
| | | Stasiun_3 | .055800 | .068061 | .698 | -.12578 | .23738 |
| | Stasiun_3 | Stasiun_1 | -.136000 | .068061 | .155 | -.31758 | .04558 |
| | | Stasiun_2 | -.055800 | .068061 | .698 | -.23738 | .12578 |

Jika nilai sig > 0,05 maka kelimpahan sama (tidak signifikan)

Uji one way keseluruhan

Epifit normalitas

| | | Tests of Normality | | | | | |
|--------|-----------|---------------------------------|----|-------|--------------|----|------|
| | | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
| | Stasiun | Statistic | df | Sig. | Statistic | df | Sig. |
| Epifit | Stasiun_1 | .272 | 5 | .200* | .916 | 5 | .502 |
| | Stasiun_2 | .238 | 5 | .200* | .895 | 5 | .382 |
| | Stasiun_3 | .205 | 5 | .200* | .963 | 5 | .828 |

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

a. Lilliefors Significance Correction

Jika > 0,05 Maka Dianggap Terdistribusi Normal

Jika < 0,05 Maka Tidak Terdistribusi Normal

Descriptives

Epifit

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|-----------|----|-----------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| Stasiun_1 | 5 | 20.850000 | 16.3005153 | 7.2898121 | .610237 | 41.089763 | 2.5400 | 41.7000 |
| Stasiun_2 | 5 | 11.346000 | 10.1572772 | 4.5424725 | -1.265925 | 23.957925 | .0000 | 23.1100 |
| Stasiun_3 | 5 | 5.304000 | 3.6091176 | 1.6140465 | .822689 | 9.785311 | .0000 | 10.0000 |
| Total | 15 | 12.500000 | 12.3687232 | 3.1935906 | 5.650429 | 19.349571 | .0000 | 41.7000 |

Test of Homogeneity of Variances

| | | Levene Statistic | df1 | df2 | Sig. |
|--------|--------------------------------------|------------------|-----|-------|------|
| Epifit | Based on Mean | 8.696 | 2 | 12 | .005 |
| | Based on Median | 1.817 | 2 | 12 | .205 |
| | Based on Median and with adjusted df | 1.817 | 2 | 6.544 | .236 |
| | Based on trimmed mean | 8.485 | 2 | 12 | .005 |

ANOVA**Epifit**

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 614.183 | 2 | 307.092 | 2.412 | .132 |
| Within Groups | 1527.611 | 12 | 127.301 | | |
| Total | 2141.794 | 14 | | | |

Jika sig > 0,05 maka rata-rata sama

Jika sig < 0,05 maka rata-rata berbeda

Sehingga : Epifit tiap stasiun rata-rata sama