

Lampiran 1. Hasil Analisis Data Komposisi makrozoobentos

| No | Spesies | jumlah kuadrat ke- | | | | | | | | | | | | | | | ni |
|--------------------|---------------|--------------------|----|----|----|----|----|---|----|----|----|----|----|----|----|----|-----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 1 | Arenicola | 3 | 2 | 1 | 3 | 2 | 3 | 0 | 0 | 1 | 0 | 15 | 13 | 12 | 0 | 4 | 59 |
| 2 | Anadara | 4 | 4 | 3 | 4 | 1 | 5 | 0 | 0 | 2 | 16 | 1 | 0 | 2 | 0 | 5 | 47 |
| 3 | Scrobicularia | 0 | 2 | 0 | 0 | 3 | 0 | 1 | 7 | 10 | 1 | 0 | 0 | 2 | 4 | 7 | 37 |
| 4 | Turitella | 3 | 2 | 4 | 0 | 5 | 5 | 0 | 2 | 0 | 1 | 2 | 1 | 2 | 3 | 2 | 32 |
| 5 | Quoyia | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 1 | 3 | 10 | 4 | 28 |
| 6 | Penaus | 0 | 0 | 5 | 3 | 0 | 1 | 5 | 1 | 0 | 1 | 0 | 2 | 2 | 2 | 4 | 26 |
| jumlah per kuadrat | | 15 | 10 | 13 | 10 | 11 | 14 | 6 | 12 | 13 | 20 | 20 | 17 | 23 | 19 | 26 | 229 |



Lampiran 2. Tabulasi Data Keanekaragaman makrozoobentos

| Stasiun | Nama Spesies | ni | N | ni/N | lnni/N | ni/N*lnni/N | S | lnN | lnS | (ni/N) ² | H' | R | E | C |
|---------|----------------------------|----|----|------|--------|-------------|---|------|------|---------------------|-----|-----|-----|--------|
| 1 | <i>Arenicola marina</i> | 3 | 15 | 0.20 | -1.61 | -0.32 | 4 | 2.71 | 1.39 | 0.04 | 1.4 | 1.1 | 1.0 | 0.3 |
| | <i>Anadara granosa</i> | 4 | 15 | 0.27 | -1.32 | -0.35 | 4 | 2.71 | 1.39 | 0.07 | | | | |
| | <i>Turritella nivea</i> | 3 | 15 | 0.20 | -1.61 | -0.32 | 4 | 2.71 | 1.39 | 0.04 | | | | |
| | <i>Quoyiadelcolate</i> | 5 | 15 | 0.33 | -1.10 | -0.37 | 4 | 2.71 | 1.39 | 0.11 | | | | |
| 2 | <i>Arenicola marina</i> | 2 | 10 | 0.20 | -1.61 | -0.32 | 4 | 2.30 | 1.39 | 0.04 | 1.3 | 1.3 | 1.0 | 0.3 |
| | <i>Anadara granosa</i> | 4 | 10 | 0.40 | -0.92 | -0.37 | 4 | 2.30 | 1.39 | 0.16 | | | | |
| | <i>Turritella nivea</i> | 2 | 10 | 0.20 | -1.61 | -0.32 | 4 | 2.30 | 1.39 | 0.04 | | | | |
| | <i>Scrobicularia plana</i> | 2 | 10 | 0.20 | -1.61 | -0.32 | 4 | 2.30 | 1.39 | 0.04 | | | | |
| 3 | <i>Arenicola marina</i> | 1 | 13 | 0.08 | -2.56 | -0.20 | 4 | 2.56 | 1.39 | 0.01 | 1.3 | 1.2 | 0.9 | 0.3 |
| | <i>Anadara granosa</i> | 3 | 13 | 0.23 | -1.47 | -0.34 | 4 | 2.56 | 1.39 | 0.05 | | | | |
| | <i>Turritella nivea</i> | 4 | 13 | 0.31 | -1.18 | -0.36 | 4 | 2.56 | 1.39 | 0.09 | | | | |
| | <i>Penausindicus</i> | 5 | 13 | 0.38 | -0.96 | -0.37 | 4 | 2.56 | 1.39 | 0.15 | | | | |
| 4 | <i>Arenicola marina</i> | 3 | 10 | 0.30 | -1.20 | -0.36 | 3 | 2.30 | 1.10 | 0.09 | 1.1 | 0.9 | 1.0 | 0.3 |
| | <i>Anadara granosa</i> | 4 | 10 | 0.40 | -0.92 | -0.37 | 3 | 2.30 | 1.10 | 0.16 | | | | |
| | <i>Penausindicus</i> | 3 | 10 | 0.30 | -1.20 | -0.36 | 3 | 2.30 | 1.10 | 0.09 | | | | |
| 5 | <i>Arenicola marina</i> | 2 | 13 | 0.15 | -1.87 | -0.29 | 5 | 2.56 | 1.61 | 0.02 | 1.5 | 1.6 | 0.9 | 0.2544 |
| | <i>Penausindicus</i> | 2 | 13 | 0.15 | -1.87 | -0.29 | 5 | 2.56 | 1.61 | 0.02 | | | | |
| | <i>Turritella nivea</i> | 5 | 13 | 0.38 | -0.96 | -0.37 | 5 | 2.56 | 1.61 | 0.15 | | | | |
| | <i>Scrobicularia plana</i> | 3 | 13 | 0.23 | -1.47 | -0.34 | 5 | 2.56 | 1.61 | 0.05 | | | | |
| | <i>Anadara granosa</i> | 1 | 13 | 0.08 | -2.56 | -0.20 | 5 | 2.56 | 1.61 | 0.01 | | | | |
| 6 | <i>Arenicola marina</i> | 3 | 14 | 0.21 | -1.54 | -0.33 | 4 | 2.64 | 1.39 | 0.05 | 1.3 | 1.1 | 0.9 | 0.3061 |
| | <i>Anadara granosa</i> | 5 | 14 | 0.36 | -1.03 | -0.37 | 4 | 2.64 | 1.39 | 0.13 | | | | |
| | <i>Turritella nivea</i> | 5 | 14 | 0.36 | -1.03 | -0.37 | 4 | 2.64 | 1.39 | 0.13 | | | | |
| | <i>Penausindicus</i> | 1 | 14 | 0.07 | -2.64 | -0.19 | 4 | 2.64 | 1.39 | 0.01 | | | | |
| 7 | <i>Scrobicularia plana</i> | 1 | 6 | 0.17 | -1.79 | -0.30 | 2 | 1.79 | 0.69 | 0.03 | 0.5 | 0.6 | 0.7 | 0.7222 |
| | <i>Penausindicus</i> | 5 | 6 | 0.83 | -0.18 | -0.15 | 2 | 1.79 | 0.69 | 0.69 | | | | |
| 8 | <i>Scrobicularia plana</i> | 7 | 12 | 0.58 | -0.54 | -0.31 | 4 | 2.48 | 1.39 | 0.34 | 1.1 | 1.2 | 0.8 | 0.4028 |
| | <i>Turritella nivea</i> | 2 | 12 | 0.17 | -1.79 | -0.30 | 4 | 2.48 | 1.39 | 0.03 | | | | |
| | <i>Quoyiadelcolate</i> | 2 | 12 | 0.17 | -1.79 | -0.30 | 4 | 2.48 | 1.39 | 0.03 | | | | |
| | <i>Penausindicus</i> | 1 | 12 | 0.08 | -2.48 | -0.21 | 4 | 2.48 | 1.39 | 0.01 | | | | |

| | | | | | | | | | | | | | | |
|----|---------------------|----|----|------|-------|-------|---|------|------|------|------|-----|-----|--------|
| 9 | Arenicola marina | 1 | 13 | 0.08 | -2.56 | -0.20 | 3 | 2.56 | 1.10 | 0.01 | 0.7 | 0.8 | 0.6 | 0.6213 |
| | Anadara granosa | 2 | 13 | 0.15 | -1.87 | -0.29 | 3 | 2.56 | 1.10 | 0.02 | | | | |
| | Scrobicularia plana | 10 | 13 | 0.77 | -0.26 | -0.20 | 3 | 2.56 | 1.10 | 0.59 | | | | |
| 10 | Anadara granosa | 16 | 20 | 0.80 | -0.22 | -0.18 | 5 | 3.00 | 1.61 | 0.64 | 0.78 | 1.3 | 0.5 | 0.6500 |
| | Scrobicularia plana | 1 | 20 | 0.05 | -3.00 | -0.15 | 5 | 3.00 | 1.61 | 0.00 | | | | |
| | Turritella nivea | 1 | 20 | 0.05 | -3.00 | -0.15 | 5 | 3.00 | 1.61 | 0.00 | | | | |
| | Quoyiadecolate | 1 | 20 | 0.05 | -3.00 | -0.15 | 5 | 3.00 | 1.61 | 0.00 | | | | |
| | Penausindicus | 1 | 20 | 0.05 | -3.00 | -0.15 | 5 | 3.00 | 1.61 | 0.00 | | | | |
| 11 | Arenicola marina | 15 | 20 | 0.75 | -0.29 | -0.22 | 4 | 3.00 | 1.39 | 0.56 | 0.83 | 1.0 | 0.6 | 0.5850 |
| | Anadara granosa | 1 | 20 | 0.05 | -3.00 | -0.15 | 4 | 3.00 | 1.39 | 0.00 | | | | |
| | Turritella nivea | 2 | 20 | 0.10 | -2.30 | -0.23 | 4 | 3.00 | 1.39 | 0.01 | | | | |
| | Quoyiadecolate | 2 | 20 | 0.10 | -2.30 | -0.23 | 4 | 3.00 | 1.39 | 0.01 | | | | |
| 12 | Arenicola marina | 13 | 17 | 0.76 | -0.27 | -0.21 | 4 | 2.83 | 1.39 | 0.58 | 0.79 | 1.1 | 0.6 | 0.6055 |
| | Turritella nivea | 1 | 17 | 0.06 | -2.83 | -0.17 | 4 | 2.83 | 1.39 | 0.00 | | | | |
| | Quoyiadecolate | 1 | 17 | 0.06 | -2.83 | -0.17 | 4 | 2.83 | 1.39 | 0.00 | | | | |
| | Penausindicus | 2 | 17 | 0.12 | -2.14 | -0.25 | 4 | 2.83 | 1.39 | 0.01 | | | | |
| 13 | Arenicola marina | 12 | 23 | 0.52 | -0.65 | -0.34 | 6 | 3.14 | 1.79 | 0.27 | 1.45 | 1.6 | 0.8 | 0.3195 |
| | Anadara granosa | 2 | 23 | 0.09 | -2.44 | -0.21 | 6 | 3.14 | 1.79 | 0.01 | | | | |
| | Scrobicularia plana | 2 | 23 | 0.09 | -2.44 | -0.21 | 6 | 3.14 | 1.79 | 0.01 | | | | |
| | Turritella nivea | 2 | 23 | 0.09 | -2.44 | -0.21 | 6 | 3.14 | 1.79 | 0.01 | | | | |
| | Quoyiadecolate | 3 | 23 | 0.13 | -2.04 | -0.27 | 6 | 3.14 | 1.79 | 0.02 | | | | |
| | Penausindicus | 2 | 23 | 0.09 | -2.44 | -0.21 | 6 | 3.14 | 1.79 | 0.01 | | | | |
| 14 | Scrobicularia plana | 4 | 19 | 0.21 | -1.56 | -0.33 | 4 | 2.94 | 1.39 | 0.04 | 1.19 | 1.0 | 0.9 | 0.36 |
| | Turritella nivea | 3 | 19 | 0.16 | -1.85 | -0.29 | 4 | 2.94 | 1.39 | 0.02 | | | | |
| | Quoyiadecolate | 10 | 19 | 0.53 | -0.64 | -0.34 | 4 | 2.94 | 1.39 | 0.28 | | | | |
| | Penausindicus | 2 | 19 | 0.11 | -2.25 | -0.24 | 4 | 2.94 | 1.39 | 0.01 | | | | |
| 15 | Arenicola marina | 4 | 26 | 0.15 | -1.87 | -0.29 | 6 | 3.26 | 1.79 | 0.02 | 1.73 | 1.5 | 1.0 | 0.19 |
| | Anadara granosa | 5 | 26 | 0.19 | -1.65 | -0.32 | 6 | 3.26 | 1.79 | 0.04 | | | | |
| | Scrobicularia plana | 7 | 26 | 0.27 | -1.31 | -0.35 | 6 | 3.26 | 1.79 | 0.07 | | | | |
| | Turritella nivea | 2 | 26 | 0.08 | -2.56 | -0.20 | 6 | 3.26 | 1.79 | 0.01 | | | | |
| | Quoyiadecolate | 4 | 26 | 0.15 | -1.87 | -0.29 | 6 | 3.26 | 1.79 | 0.02 | | | | |
| | Penausindicus | 4 | 26 | 0.15 | -1.87 | -0.29 | 6 | 3.26 | 1.79 | 0.02 | | | | |

Lampiran 3. Tabulasi Data Kelimpahan Akumulatif Makrozoobentos

| No | Spesies | ni | N | ni/N | KR |
|----|----------------------------|----|-----|--------|----------|
| 1 | <i>Arenicola marina</i> | 59 | 229 | 0.2576 | 25.76419 |
| 2 | <i>Anadara granosa</i> | 47 | 229 | 0.2052 | 20.52402 |
| 3 | <i>Scrobicularia plana</i> | 37 | 229 | 0.1616 | 16.15721 |
| 4 | <i>Turritella nivea</i> | 32 | 229 | 0.1397 | 13.9738 |
| 5 | <i>Quoyiadecolate</i> | 28 | 229 | 0.1223 | 12.22707 |
| 6 | <i>Penaesusindicus</i> | 26 | 229 | 0.1135 | 11.35371 |









Lampiran 4. Tabulasi Data Kelimpahan Makrozoobentos

| Stasiun | Nama Spesies | ni | N | ni/N | KR |
|----------------|---------------------|-----------|----------|-------------|-----------|
| 1 | Arenicola marina | 3 | 15 | 0.2000 | 20.0000 |
| | Anadara granosa | 4 | 15 | 0.2667 | 26.6667 |
| | Turritella nivea | 3 | 15 | 0.2000 | 20.0000 |
| | Quoyiadecolote | 5 | 15 | 0.3333 | 33.3333 |
| 2 | Arenicola marina | 2 | 10 | 0.2000 | 20.0000 |
| | Anadara granosa | 4 | 10 | 0.4000 | 40.0000 |
| | Turritella nivea | 2 | 10 | 0.2000 | 20.0000 |
| | Scrobicularia plana | 2 | 10 | 0.2000 | 20.0000 |
| 3 | Arenicola marina | 1 | 13 | 0.0769 | 7.6923 |
| | Anadara granosa | 3 | 13 | 0.2308 | 23.0769 |
| | Turritella nivea | 4 | 13 | 0.3077 | 30.7692 |
| | Penausindicus | 5 | 13 | 0.3846 | 38.4615 |
| 4 | Arenicola marina | 3 | 10 | 0.3000 | 30.0000 |
| | Anadara granosa | 4 | 10 | 0.4000 | 40.0000 |
| | Penausindicus | 3 | 10 | 0.3000 | 30.0000 |
| 5 | Arenicola marina | 2 | 13 | 0.1538 | 15.3846 |
| | Penausindicus | 2 | 13 | 0.1538 | 15.3846 |
| | Turritella nivea | 5 | 13 | 0.3846 | 38.4615 |
| | Scrobicularia plana | 3 | 13 | 0.2308 | 23.0769 |
| | Anadara granosa | 1 | 13 | 0.0769 | 7.69231 |
| 6 | Arenicola marina | 3 | 14 | 0.2143 | 21.4286 |
| | Anadara granosa | 5 | 14 | 0.3571 | 35.7143 |
| | Turritella nivea | 5 | 14 | 0.3571 | 35.7143 |
| | Penausindicus | 1 | 14 | 0.0714 | 7.14286 |
| 7 | Scrobicularia plana | 1 | 6 | 0.1667 | 16.6667 |
| | Penausindicus | 5 | 6 | 0.8333 | 83.3333 |
| 8 | Scrobicularia plana | 7 | 12 | 0.5833 | 58.3333 |
| | Turritella nivea | 2 | 12 | 0.1667 | 16.6667 |
| | Quoyiadecolote | 2 | 12 | 0.1667 | 16.6667 |
| | Penausindicus | 1 | 12 | 0.0833 | 8.3333 |
| 9 | Arenicola marina | 1 | 13 | 0.0769 | 7.6923 |
| | Anadara granosa | 2 | 13 | 0.1538 | 15.3846 |
| | Scrobicularia plana | 10 | 13 | 0.7692 | 76.9231 |

| | | | | | |
|----|---------------------|----|----|--------|---------|
| | | | | | |
| 10 | Anadara granosa | 16 | 20 | 0.8000 | 80.0000 |
| | Scrobicularia plana | 1 | 20 | 0.0500 | 5.0000 |
| | Turritella nivea | 1 | 20 | 0.0500 | 5.0000 |
| | Quoyiadecolate | 1 | 20 | 0.0500 | 5.0000 |
| | Penausindicus | 1 | 20 | 0.0500 | 5.0000 |
| | | | | | |
| 11 | Arenicola marina | 15 | 20 | 0.7500 | 75.0000 |
| | Anadara granosa | 1 | 20 | 0.0500 | 5.0000 |
| | Turritella nivea | 2 | 20 | 0.1000 | 10.0000 |
| | Quoyiadecolate | 2 | 20 | 0.1000 | 10.0000 |
| | | | | | |
| 12 | Arenicola marina | 13 | 17 | 0.7647 | 76.4706 |
| | Turritella nivea | 1 | 17 | 0.0588 | 5.8824 |
| | Quoyiadecolate | 1 | 17 | 0.0588 | 5.8824 |
| | Penausindicus | 2 | 17 | 0.1176 | 11.7647 |
| | | | | | |
| 13 | Arenicola marina | 12 | 23 | 0.5217 | 52.1739 |
| | Anadara granosa | 2 | 23 | 0.0870 | 8.6957 |
| | Scrobicularia plana | 2 | 23 | 0.0870 | 8.6957 |
| | Turritella nivea | 2 | 23 | 0.0870 | 8.6957 |
| | Quoyiadecolate | 3 | 23 | 0.1304 | 13.0435 |
| | Penausindicus | 2 | 23 | 0.0870 | 8.6957 |
| | | | | | |
| 14 | Scrobicularia plana | 4 | 19 | 0.2105 | 21.0526 |
| | Turritella nivea | 3 | 19 | 0.1579 | 15.7895 |
| | Quoyiadecolate | 10 | 19 | 0.5263 | 52.6316 |
| | Penausindicus | 2 | 19 | 0.1053 | 10.5263 |
| | | | | | |
| 15 | Arenicola marina | 4 | 26 | 0.1538 | 15.3846 |
| | Anadara granosa | 5 | 26 | 0.1923 | 19.2308 |
| | Scrobicularia plana | 7 | 26 | 0.2692 | 26.9231 |
| | Turritella nivea | 2 | 26 | 0.0769 | 7.6923 |
| | Quoyiadecolate | 4 | 26 | 0.1538 | 15.3846 |
| | Penausindicus | 4 | 26 | 0.1538 | 15.3846 |

Lampiran 5. Gambar Makrozoobentos yang Berhasil Diidentifikasi

| No. | Nama Spesies | Gambar |
|-----|----------------------------|--|
| 1 | <i>Arenicola marina</i> |  |
| 2 | <i>Anadara granosa</i> |  |
| 3 | <i>Scrobicularia plana</i> |  |
| 4 | <i>Turitella novea</i> |  |

| | | |
|---|-----------------|---|
| 5 | Quoyia decolote |  |
| 6 | Penaeus indicus |  |

