**Supplementary Material**

Table S1. Salp video specimens we analyzed with their video specifications and their mean morphological and kinematic attributes.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Video file** | **Type** | **FPS** | **Species** | **Architecture** | **Number of measurements** | **Timespan of measurements (s)** | **Number of zooids** | **Mean zooid length (mm)** | **Mean zooid width (mm)** | **Pulsation rate (pulses/s)** | **Mean swimming speed (mm/s)** |
| **A001C0113\_20210709170400\_0001** | 3D | 120 | *Brooksia rostrata* | Bipinnate | 9 | 1.51 | 34 | 7.144 | 2.693 | 2.5 | 30.25 |
| **A001C0114\_20210709170545\_0001** | 3D | 120 | *Brooksia rostrata* | Bipinnate | 9 | 1.50 | 33 | 6.902 | 3.4 | 3 | 28.32 |
| **A001C0143\_20210709181838\_0001\_1** | 3D | 120 | *Brooksia rostrata* | Bipinnate | 9 | 1.50 | 11 | 7.963 | 4.026 | 2.75 | 58.79 |
| **A001C0223\_20210917230616\_0001** | 3D | 120 | *Brooksia rostrata* | Bipinnate | 9 | 1.51 | 35 | 4.363 | 2.306 | 2.56 | 34.83 |
| **A001C0294\_20210920202610\_0001** | 3D | 120 | *Brooksia rostrata* | Bipinnate | 9 | 1.51 | 17 | 10.592 | 4.322 | 2.25 | 19.94 |
| **A001C0284\_20210919222752\_0001** | 3D | 120 | *Ritteriella amboinensis* | Bipinnate | 7 | 1.17 | 47 | 13.449 | 7.488 | 2.8 | 68.65 |
| **A001C0288\_20210919223646\_0001** | 3D | 120 | *Ritteriella amboinensis* | Bipinnate | 9 | 1.51 | 6 | 13.729 | 6.186 | 1.73 | 38.26 |
| **A001C0321\_20210921220020\_0001** | 3D | 120 | *Ritteriella amboinensis* | Bipinnate | 7 | 1.17 | 2 | 69.473 | 33.031 | 0.75 | 52.90 |
| **A001C0322\_20210921220127\_0001** | 3D | 120 | *Ritteriella amboinensis* | Bipinnate | 14 | 2.33 | 21 | 26.047 | 9.561 | 2.75 | 33.12 |
| **A001C0323\_20210921220235\_0001** | 3D | 120 | *Ritteriella amboinensis* | Bipinnate | 15 | 2.50 | 21 | 22.705 | 10.298 | 2.2 | 22.47 |
| **A001C0331\_20210921221849\_0001** | 3D | 120 | *Ritteriella amboinensis* | Bipinnate | 9 | 1.50 | 19 | 21.485 | 12.129 | 3 | 55.50 |
| **A001C0332\_20210921222049\_0001\_2** | 3D | 120 | *Ritteriella amboinensis* | Bipinnate | 7 | 1.17 | 19 | 20.047 | 13.747 | 1.5 | 35.01 |
| **A001C0332\_20210921222049\_0001\_1** | 3D | 120 | *Ritteriella amboinensis* | Bipinnate | 1 | 0.17 | 19 | 21.48 | 12.695 | 1.5 | 20.09 |
| **A002C0018\_20220420225725\_0001** | 3D | 60 | *Ritteriella amboinensis* | Bipinnate | 8 | 2.67 | 10 | 22.403 | 11.767 | 1.14 | 56.31 |
| **A001C0348\_20210922220852\_0001** | 3D | 120 | *Ritteriella* sp. | Bipinnate | 9 | 1.50 | 38 | 16.593 | 7.375 | 1.5 | 61.56 |
| **A001C0349\_20210922220958\_0001** | 3D | 120 | *Ritteriella* sp. | Bipinnate | 20 | 3.34 | 31 | 23.682 | 16.25 | 1.25 | 33.81 |
| **A001C0349\_20210922220958\_0001** | 3D | 120 | *Ritteriella* sp. | Bipinnate | 20 | 3.34 | 31 | 23.682 | 16.25 | 1.13 | 33.81 |
| **A001C0344\_20210922220308\_0001** | 3D | 120 | *Cyclosalpa polae* | Cluster | 10 | 2.51 | 7 | 17.275 | 12.861 | 1 | 55.48 |
| **A002C0047\_20220421225032\_0001** | 3D | 60 | *Cyclosalpa polae* | Cluster | 9 | 4.51 | 2 | 17.091 | 33.996 | 1.33 | 39.73 |
| **A001C0247\_20210918223147\_0001\_1** | 3D | 120 | *Cyclosalpa sewelli* | Cluster | 7 | 1.17 | 7 | 17.764 | 8.919 | 1.2 | 46.27 |
| **A001C0262\_20210919202019\_0001** | 3D | 120 | *Cyclosalpa sewelli* | Cluster | 9 | 1.50 | 7 | 12.584 | 3.675 | 1.33 | 21.10 |
| **A001C0274\_20210919203457\_0001** | 3D | 120 | *Cyclosalpa sewelli* | Cluster | 9 | 1.50 | 7 | 17.705 | 13.97 | 2 | 14.06 |
| **A001C0283\_20210919222440\_0001** | 3D | 120 | *Cyclosalpa sewelli* | Cluster | 9 | 1.51 | 6 | 9.458 | 5.528 | 1.5 | 49.58 |
| **A001C0326\_20210921220800\_0001** | 3D | 120 | *Cyclosalpa sewelli* | Cluster | 9 | 1.51 | 2 | 17.069 | 7.959 | 1.25 | 8.99 |
| **A001C0358\_20210922222944\_0001** | 3D | 120 | *Cyclosalpa sewelli* | Cluster | 9 | 1.50 | 10 | 15.668 | 10.298 | 1.25 | 20.66 |
| **GX010177\_Helicosalpa\_Trim** | 2D | 60 | *Helicosalpa virgula* | Helical | 7 | 1.20 | 60 | 11.5 | 6.4 | 3.33 | 49.86 |
| **A001C0093\_20210708143858\_0001** | 3D | 60 | *Iasis cylindrica* | Linear | 9 | 3.01 | 75 | 4.011 | 2.27 | 2.75 | 49.83 |
| **A001C0143\_20210709181838\_0001\_2** | 3D | 120 | *Iasis cylindrica* | Linear | 6 | 1.00 | 49 | 4.399 | 3.081 | 3 | 48.77 |
| **A001C0147\_20210709182345\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 30 | NA | NA | 2.17 | 43.20 |
| **A001C0164\_20210709183900\_0001\_1** | 3D | 120 | *Iasis cylindrica* | Linear | 13 | 2.21 | 44 | NA | NA | 3 | 51.55 |
| **A001C0164\_20210709183900\_0001\_2** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 9 | NA | NA | 5 | 36.22 |
| **A001C0165\_20210709184012\_0001\_1** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 24 | NA | NA | 2.75 | 48.29 |
| **A001C0165\_20210709184012\_0001\_2** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 89 | NA | NA | 2.75 | 59.70 |
| **A001C0166\_20210709184051\_0001\_1** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 94 | NA | NA | 3 | 38.18 |
| **A001C0167\_20210709184129\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 19 | 12.936 | 6.246 | 3.25 | 52.55 |
| **A001C0169\_20210709184226\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 8 | 1.33 | 13 | NA | NA | 3 | 101.65 |
| **A001C0170\_20210709184247\_0001\_2** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 46 | NA | NA | 5.78 | 58.74 |
| **A001C0171\_20210709184313\_0001\_2** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.58 | 153 | 4.387 | 3.277 | 1.83 | 40.03 |
| **A001C0171\_20210709184313\_0001\_3** | 3D | 120 | *Iasis cylindrica* | Linear | 10 | 1.67 | 72 | 4.384 | 2.968 | 1.83 | 66.49 |
| **A001C0172\_20210709184345\_0001\_2** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 10 | 8.295 | 4.276 | 4 | 81.51 |
| **A001C0173\_20210709184408\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 10 | 1.67 | 25 | 12.964 | 6.301 | 5.5 | 74.50 |
| **A001C0173\_20210709184408\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 10 | 1.67 | 9 | 12.964 | 6.301 | 5.5 | 74.50 |
| **A001C0178\_20210709184853\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 47 | 11.129 | 3.892 | 3.88 | 49.01 |
| **A001C0179\_20210709184957\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.51 | 11 | 12.45 | 5.628 | 2.33 | 71.53 |
| **A001C0192\_20210710135057\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 3 | 8.197 | 3.8 | 5 | 73.47 |
| **A001C0279\_20210919221855\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 12 | 7.079 | 2.363 | 4.67 | 45.89 |
| **A001C0336\_20210921222915\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 17 | 11.806 | 5.368 | 4 | 58.15 |
| **A001C0339\_20210921223812\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.50 | 12 | 10.575 | 5.944 | 2.57 | 96.65 |
| **A001C0346\_20210922220601\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 18 | 3.00 | 36 | 7.753 | 5.053 | 4.8 | 79.08 |
| **A001C0346\_20210922220601\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 18 | 3.00 | 36 | 7.753 | 5.053 | 3.89 | 79.08 |
| **A001C0354\_20210922222311\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 9 | 1.54 | 19 | 10.264 | 6.371 | 2.83 | 102.18 |
| **A001C0355\_20210922222503\_0001** | 3D | 120 | *Iasis cylindrica* | Linear | 7 | 1.18 | 77 | 7.307 | 4.041 | 4.17 | 53.07 |
| **A002C0044\_20220421224612\_0001\_1** | 3D | 60 | *Iasis cylindrica* | Linear | 9 | 3.01 | 120 | 6.143 | 2.546 | 2.67 | 56.34 |
| **A002C0044\_20220421224612\_0001\_2** | 3D | 60 | *Iasis cylindrica* | Linear | 14 | 2.33 | 17 | 12.401 | 5.106 | 3.25 | 69.39 |
| **A002C0045\_20220421224748\_0001** | 3D | 60 | *Iasis cylindrica* | Linear | 5 | 1.67 | 88 | 9.587 | 5.544 | 2.67 | 61.48 |
| **A002C0078\_20220422224659\_0001** | 3D | 60 | *Iasis cylindrica* | Linear | 9 | 3.01 | 60 | 7.767 | 4.856 | 5.4 | 43.76 |
| **A002C0079\_20220422224739\_0001** | 3D | 60 | *Iasis cylindrica* | Linear | 9 | 3.00 | 51 | NA | NA | NA | 35.00 |
| **A002C0089\_20220422230510\_0001** | 3D | 60 | *Iasis cylindrica* | Linear | 9 | 3.00 | 9 | 9.326 | 5.86 | 5.33 | 54.97 |
| **A001C0353\_20210922221657\_0001** | 3D | 120 | *Metcalfina hexagona* | Linear | 9 | 1.50 | 7 | 10.879 | 6.975 | 3 | 71.25 |
| **A002C0035\_20220421223821\_0001** | 3D | 60 | *Metcalfina hexagona* | Linear | 6 | 2.00 | 22 | 30.057 | 12.198 | 3 | 97.43 |
| **A002C0071\_20220422223546\_0001** | 3D | 60 | *Metcalfina hexagona* | Linear | 18 | 6.00 | 9 | 28.887 | 17.127 | 2.1 | 71.69 |
| **A002C0071\_20220422223546\_0001** | 3D | 60 | *Metcalfina hexagona* | Linear | 18 | 6.00 | 9 | 28.887 | 17.127 | 2.43 | 71.69 |
| **A002C0075\_20220422224136\_0001\_1** | 3D | 60 | *Metcalfina hexagona* | Linear | 6 | 2.00 | 23 | 28.519 | 12.844 | 2.46 | 131.25 |
| **A002C0075\_20220422224136\_0001\_2** | 3D | 60 | *Metcalfina hexagona* | Linear | 12 | 4.00 | 23 | 26.693 | 14.766 | 1.85 | 160.22 |
| **A002C0075\_20220422224136\_0001\_2** | 3D | 60 | *Metcalfina hexagona* | Linear | 12 | 4.00 | 23 | 26.693 | 14.766 | 2.2 | 160.22 |
| **A002C0076\_20220422224245\_0001** | 3D | 60 | *Metcalfina hexagona* | Linear | 12 | 4.01 | 23 | 30.239 | 17.388 | 2.08 | 111.52 |
| **A002C0076\_20220422224245\_0001** | 3D | 60 | *Metcalfina hexagona* | Linear | 12 | 4.01 | 23 | 30.239 | 17.388 | 2.1 | 111.52 |
| **A001C0334\_20210921222327\_0001** | 3D | 120 | *Salpa aspera* | Linear | 9 | 1.50 | 8 | 27.926 | 14.631 | 2.5 | 145.45 |
| **A001C0335\_20210921222656\_0001** | 3D | 120 | *Salpa aspera* | Linear | 9 | 1.50 | 8 | 30.132 | 15.661 | 2.33 | 110.41 |
| **A002C0042\_20220421224445\_0001** | 3D | 60 | *Salpa aspera* | Linear | 6 | 2.00 | 7 | 24.502 | 18.494 | 1.78 | 118.80 |
| **A002C0053\_20220421225858\_0001** | 3D | 60 | *Salpa aspera* | Linear | 8 | 2.75 | 29 | 19.568 | 11 | 2.4 | 102.55 |
| **A002C0062\_20220421231037\_0001** | 3D | 60 | *Salpa aspera* | Linear | 9 | 3.01 | 2 | 41.084 | 15.521 | 1.29 | 88.33 |
| **A002C0080\_20220422224908\_0001** | 3D | 60 | *Salpa aspera* | Linear | 8 | 2.66 | 6 | 28.543 | 10.405 | 2.86 | 117.07 |
| **A002C0081\_20220422224921\_0001** | 3D | 60 | *Salpa aspera* | Linear | 8 | 2.67 | 6 | 26.068 | 8.932 | 1.6 | 117.48 |
| **A001C0205\_20210710141212\_0001\_1** | 3D | 120 | *Salpa fusiformis* | Linear | 9 | 1.50 | 15 | 10.685 | 5.114 | 5.43 | 31.44 |
| **A001C0225\_20210917231024\_0001** | 3D | 120 | *Salpa fusiformis* | Linear | 9 | 1.50 | 7 | 9.448 | 4.298 | 2 | 47.47 |
| **A001C0230\_20210918220927\_0001** | 3D | 120 | *Salpa fusiformis* | Linear | 5 | 0.83 | 27 | 8.428 | 4.307 | 4.25 | 69.08 |
| **A001C0350\_20210922221154\_0001** | 3D | 120 | *Salpa fusiformis* | Linear | 9 | 1.50 | 16 | 21.126 | 7.991 | 2.2 | 55.35 |
| **A002C0059\_20220421230521\_0001** | 3D | 60 | *Salpa fusiformis* | Linear | 12 | 4.01 | 21 | 18.078 | 7.499 | 2.44 | 91.67 |
| **A002C0059\_20220421230521\_0001** | 3D | 60 | *Salpa fusiformis* | Linear | 12 | 4.01 | 21 | 18.078 | 7.499 | 2.17 | 91.67 |
| **A002C0072\_20220422223646\_0001** | 3D | 60 | *Salpa fusiformis* | Linear | 9 | 3.00 | 17 | 27.564 | 14.766 | 3.75 | 43.57 |
| **A002C0095\_20220422231109\_0001** | 3D | 60 | *Salpa fusiformis* | Linear | 9 | 3.01 | 4 | 24.133 | 10.177 | 2 | 27.09 |
| **A001C0320\_20210921215927\_0001** | 3D | 120 | *Salpa maxima* | Linear | 8 | 1.33 | 2 | 48.129 | 30.804 | 1 | 71.99 |
| **A002C0019\_20220420225823\_0001\_1** | 3D | 60 | *Salpa maxima* | Linear | 11 | 3.67 | 2 | 68.311 | 34.78 | 0.5 | 74.01 |
| **A002C0019\_20220420225823\_0001\_2** | 3D | 60 | *Salpa maxima* | Linear | 8 | 2.67 | 2 | 68.311 | 34.78 | 0.5 | 47.55 |
| **C0164** | 2D | 120 | *Salpa maxima* | Linear | 7 | 0.87 | 2 | NA | NA | NA | 30.03 |
| **A001C0247\_20210918223147\_0001\_2** | 3D | 120 | *Soestia zonaria* | Linear | 8 | 1.34 | 8 | 25.304 | 12.515 | 1.5 | 141.34 |
| **A001C0252\_20210918223920\_0001** | 3D | 120 | *Soestia zonaria* | Linear | 9 | 1.50 | 8 | NA | NA | 1.14 | 142.34 |
| **A001C0357\_20210922222753\_0001** | 3D | 120 | *Soestia zonaria* | Linear | 9 | 1.50 | 7 | 6.499 | 4.37 | 1.83 | 84.33 |
| **GX010104** | 2D | 240 | *Soestia zonaria* | Linear | 8 | 0.50 | 20 | 9.162 | 3.417 | 3 | 68.68 |
| **C0123\_b** | 2D | 30 | *Thalia* sp. | Oblique | 28 | 13.13 | 29 | 3.508 | 2.281 | 4.5 | 5.84 |
| **A001C0341\_20210921224426\_0001** | 3D | 120 | *Pegea* sp. | Transversal | 7 | 1.75 | 20 | 31.186 | 11.264 | 1.9 | 15.88 |
| **A001C0352\_20210922221526\_0001** | 3D | 120 | *Pegea* sp. | Transversal | 11 | 2.75 | 4 | 30.728 | 16.412 | 1.5 | 24.78 |
| **C0066** | 2D | 30 | *Cyclosalpa affinis* | Whorl | 11 | 5.50 | 4 | 41.74 | 17.384 | 1.219512195 | 18.82 |
| **c0165\_b** | 2D | 30 | *Cyclosalpa affinis* | Whorl | 4 | 2.00 | 6 | 24.178 | 8.754 | 1.5 | 30.11 |
| **A001C0207\_20210710141533\_0001** | 3D | 120 | *Cyclosalpa bakeri* | Whorl | 9 | 2.50 | 4 | 8.44 | 4.664 | 2.38 | 11.86 |
| **A001C0209\_20210710141857\_0001** | 3D | 120 | *Cyclosalpa bakeri* | Whorl | 9 | 1.50 | 4 | 8.702 | 3.699 | 2.63 | 11.49 |
| **A001C0210\_20210710142059\_0001\_1** | 3D | 120 | *Cyclosalpa bakeri* | Whorl | 9 | 1.50 | 6 | 4.519 | 2.036 | 4.33 | 10.46 |
| **A001C0211\_20210710142218\_0001** | 3D | 120 | *Cyclosalpa bakeri* | Whorl | 9 | 1.50 | 6 | 4.297 | 2.552 | 2 | 6.83 |
| **A001C0214\_20210710142543\_0001** | 3D | 120 | *Cyclosalpa bakeri* | Whorl | 9 | 1.50 | 6 | 10.659 | 4.358 | 3.45 | 11.08 |
| **A001C0330\_20210921221301\_0001** | 3D | 120 | *Cyclosalpa bakeri* | Whorl | 11 | 1.84 | 11 | 8.057 | 3.892 | 2 | 8.73 |
| **A002C0073\_20220422223852\_0001** | 3D | 60 | *Cyclosalpa bakeri* | Whorl | 7 | 3.50 | 13 | 4.545 | 2.311 | 1.64 | 12.49 |
| **C0070** | 2D | 30 | *Cyclosalpa quadriluminis* | Whorl | 6 | 3.00 | 8 | 27.104 | 12.105 | 1.33 | 25.26 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table S2. Salp specimens we used in the respirometry experiments with their mean physiological attributes. | | | | | | | | | | | | | | | | | |
| **Specimen** | **Species** | **Architecture** | **Experiment** | **Date** | **Activity level** | **Zooid length (mm)** | **Number of zooids** | **Colony volume (ml)** | **Container volume (ml)** | **Treatment** | **Timespan (min)** | **Temperature range (°C)** | **Gross respiration rate (mgO2/min)** | **Control rate (mgO2/min)** | **Net respiration rate (mgO2/min)** | **Biovolume-corrected gross respiration rate (pgO2/min/ml)** | **Biovolume-corrected net respiration rate (pgO2/min/ml)** | |
| **D28-Bros-B-1** | *Brooksia rostrata* | Bipinnate | 15 | 6/27/2022 | Anesthetized | 8 | 9 | 0.5 | 208 | Anesthetized | 150 | 1.7 | 0.00012 | 0.00008 | 0.00005 | 277.12 | 104.02 | |
| **D35-Bros-B-1** | *Brooksia rostrata* | Bipinnate | 21 | 9/12/2022 | Anesthetized | 4 | 22 | 0.2 | 208 | Anesthetized | 200 | 5.1 | 0.00007 | 0.00012 | -0.00005 | 364.00 | -245.14 | |
| **D39-Bros-B-2** | *Brooksia rostrata* | Bipinnate | 23 | 9/14/2022 | Anesthetized | 4 | 12 | 0.2 | 208 | Anesthetized | 240 | 0.8 | 0.00020 | 0.00009 | 0.00011 | 1005.12 | 556.50 | |
| **D41-Bros-B-1** | *Brooksia rostrata* | Bipinnate | 24 | 9/15/2022 | Anesthetized | 11 | 37 | 11.5 | 208 | Anesthetized | 270 | 0.5 | -0.00011 | 0.00000 | -0.00011 | -9.52 | -9.65 | |
| **D11-BR-B-1** | *Brooksia rostrata* | Bipinnate | 6 | 9/22/2021 | Moderate | 10 | 14 | 7.4 | 208 | Intact | 295 | 2.3 | -0.00023 | -0.00002 | -0.00021 | -31.60 | -28.89 | |
| **D11-BR-B-2** | *Brooksia rostrata* | Bipinnate | 6 | 9/22/2021 | Moderate | 7.5 | 32 | 8.9 | 208 | Intact | 295 | 2.3 | -0.00029 | -0.00002 | -0.00027 | -31.98 | -29.73 | |
| **D15-BR-B-1** | *Brooksia rostrata* | Bipinnate | 8 | 4/19/2022 | Moderate | 10 | 8 | 0.8 | 208 | Intact | 123 | 1.5 | 0.00024 | 0.00010 | 0.00014 | 299.86 | 172.37 | |
| **D15-BR-B-2** | *Brooksia rostrata* | Bipinnate | 8 | 4/19/2022 | Moderate | 3 | 14 | 3.8 | 208 | Intact | 123 | 1.5 | 0.00040 | 0.00010 | 0.00030 | 106.39 | 79.28 | |
| **D21-BR-B-1** | *Brooksia rostrata* | Bipinnate | 11 | 4/22/2022 | Moderate | 4 | 14 | 0.2 | 208 | Intact | 150 | 1.2 | 0.00017 | 0.00006 | 0.00012 | 855.52 | 579.73 | |
| **D25-BR-B-1** | *Brooksia rostrata* | Bipinnate | 13 | 4/25/2022 | Moderate | 4 | 60 | 1.0 | 208 | Intact | 126 | 1.2 | 0.00019 | 0.00025 | -0.00007 | 187.34 | -67.12 | |
| **D31-Bros-B-1** | *Brooksia rostrata* | Bipinnate | 18 | 6/30/2022 | Moderate | 3 | 7 | 0.1 | 208 | Intact | 180 | 3.0 | 0.00005 | -0.00003 | 0.00008 | 520.00 | 802.86 | |
| **D7-BR-B-1** | *Brooksia rostrata* | Bipinnate | 4 | 9/20/2021 | Very active | 7 | 28 | 8.0 | 208 | Intact | 300 | NA | -0.00040 | -0.00009 | -0.00031 | -49.29 | -38.27 | |
| **D7-BR-B-2** | *Brooksia rostrata* | Bipinnate | 4 | 9/20/2021 | Very active | 8 | 24 | 7.9 | 208 | Intact | 300 | NA | -0.00047 | -0.00009 | -0.00038 | -59.17 | -48.00 | |
| **D7-BR-B-3** | *Brooksia rostrata* | Bipinnate | 4 | 9/20/2021 | Very active | 8 | 19 | 7.1 | 208 | Intact | 300 | NA | -0.00038 | -0.00009 | -0.00029 | -53.27 | -40.87 | |
| **D29-Bros-B-1** | *Brooksia rostrata* | Bipinnate | 16 | 6/28/2022 | Active | 6 | 8 | 0.2 | 208 | Paired | 120 | 2.2 | 0.00008 | 0.00006 | 0.00001 | 331.59 | 60.29 | |
| **D29-Bros-B-1** | *Brooksia rostrata* | Bipinnate | 16 | 6/28/2022 | Active | 6 | 8 | 0.2 | 208 | Paired | 90 | 0.2 | -0.00017 | -0.00002 | -0.00015 | -723.48 | -640.00 | |
| **D29-Bros-B-2** | *Brooksia rostrata* | Bipinnate | 16 | 6/28/2022 | Active | 7 | 17 | 1.1 | 208 | Paired | 120 | 2.2 | 0.00011 | 0.00006 | 0.00005 | 100.85 | 44.12 | |
| **D29-Bros-B-2** | *Brooksia rostrata* | Bipinnate | 16 | 6/28/2022 | Active | 7 | 17 | 1.1 | 208 | Paired | 90 | 0.2 | -0.00021 | -0.00002 | -0.00020 | -195.39 | -177.94 | |
| **D31-Caff-B-1** | *Cyclosalpa affinis* | Whorl | 18 | 6/30/2022 | Anesthetized | 32 | 8 | 5.5 | 208 | Anesthetized | 180 | 3.0 | -0.00068 | -0.00003 | -0.00065 | -122.91 | -117.77 | |
| **D31-Caff-B-2** | *Cyclosalpa affinis* | Whorl | 18 | 6/30/2022 | Anesthetized | 32 | 6 | 8.0 | 208 | Anesthetized | 180 | 3.0 | -0.00073 | -0.00003 | -0.00070 | -90.69 | -87.15 | |
| **D11-CA-B-1** | *Cyclosalpa affinis* | Whorl | 6 | 9/22/2021 | Active | 45 | 6 | 24.3 | 208 | Intact | 295 | 2.3 | -0.00275 | -0.00002 | -0.00273 | -113.22 | -112.40 | |
| **D13-CA-B-1** | *Cyclosalpa affinis* | Whorl | 7 | 9/23/2021 | Active | 35 | 6 | 19.1 | 208 | Intact | 30 | 2.0 | -0.00208 | 0.00010 | -0.00218 | -108.78 | -113.80 | |
| **D13-CA-B-2** | *Cyclosalpa affinis* | Whorl | 7 | 9/23/2021 | Active | 35 | 6 | 19.1 | 208 | Intact | 105 | 0.8 | -0.00188 | -0.00025 | -0.00163 | -98.49 | -85.46 | |
| **D13-CA-B-3** | *Cyclosalpa affinis* | Whorl | 7 | 9/23/2021 | Active | 35 | 6 | 19.1 | 208 | Intact | 156 | 1.6 | -0.00137 | -0.00006 | -0.00131 | -71.51 | -68.28 | |
| **D15-CAff-B-1** | *Cyclosalpa affinis* | Whorl | 8 | 4/19/2022 | Active | 50 | 6 | 42.0 | 208 | Intact | 123 | 1.5 | -0.00694 | 0.00010 | -0.00704 | -165.15 | -167.58 | |
| **D17-Caff-B-1** | *Cyclosalpa affinis* | Whorl | 9 | 4/20/2022 | Moderate | 35 | 11 | 27.5 | 208 | Intact | 120 | 1.4 | -0.00467 | 0.00009 | -0.00476 | -169.74 | -173.09 | |
| **D17-Caff-B-2** | *Cyclosalpa affinis* | Whorl | 9 | 4/20/2022 | Active | 40 | 8 | 48.0 | 980 | Intact | 120 | 1.4 | -0.00379 | 0.00009 | -0.00389 | -79.06 | -80.98 | |
| **D7-CA-B-1** | *Cyclosalpa affinis* | Whorl | 4 | 9/20/2021 | Moderate | 40 | 4 | 21.4 | 208 | Intact | 300 | NA | -0.00246 | -0.00009 | -0.00237 | -114.72 | -110.57 | |
| **D32-Cbak-B-1** | *Cyclosalpa bakeri* | Whorl | 19 | 7/1/2022 | Anesthetized | 12 | 5 | 1.3 | 208 | Anesthetized | 180 | 3.1 | 0.00020 | 0.00007 | 0.00013 | 150.48 | 97.73 | |
| **D39-Cbak-B-1** | *Cyclosalpa bakeri* | Whorl | 23 | 9/14/2022 | Anesthetized | 9 | 4 | 0.2 | 208 | Anesthetized | 240 | 0.8 | 0.00019 | 0.00009 | 0.00010 | 968.82 | 520.20 | |
| **D19-Cbak-B-1** | *Cyclosalpa bakeri* | Whorl | 10 | 4/21/2022 | Moderate | 12 | 6 | 3.6 | 208 | Intact | 120 | 1.2 | -0.00003 | 0.00026 | -0.00030 | -9.52 | -82.25 | |
| **D37-Cbak-B-1** | *Cyclosalpa bakeri* | Whorl | 22 | 9/13/2022 | Low | 10 | 8 | 1.5 | 208 | Intact | 180 | 0.3 | -0.00014 | 0.00000 | -0.00014 | -91.02 | -93.65 | |
| **D44-Cbak-B-1** | *Cyclosalpa bakeri* | Whorl | 27 | 05/06/2023 | Moderate | 20 | 9 | 7.0 | 208 | Paired | 264 | 2.3 | -0.00063 | -0.00004 | -0.00059 | -90.69 | -84.52 | |
| **D44-Cbak-B-1** | *Cyclosalpa bakeri* | Whorl | 27 | 05/06/2023 | Moderate | 20 | 9 | 7.0 | 208 | Paired | 155 | 0.7 | -0.00004 | 0.00007 | -0.00011 | -5.80 | -15.69 | |
| **D44-Cbak-B-2** | *Cyclosalpa bakeri* | Whorl | 27 | 05/06/2023 | Moderate | 17 | 11 | 5.1 | 208 | Paired | 264 | 2.3 | -0.00058 | -0.00004 | -0.00054 | -114.15 | -105.68 | |
| **D44-Cbak-B-2** | *Cyclosalpa bakeri* | Whorl | 27 | 05/06/2023 | Moderate | 17 | 11 | 5.1 | 208 | Paired | 155 | 0.7 | -0.00004 | 0.00007 | -0.00011 | -8.22 | -21.80 | |
| **D44-Cbak-B-3** | *Cyclosalpa bakeri* | Whorl | 27 | 05/06/2023 | Moderate | 22 | 5 | 2.0 | 208 | Paired | 264 | 2.3 | -0.00047 | -0.00004 | -0.00043 | -237.16 | -215.58 | |
| **D44-Cbak-B-3** | *Cyclosalpa bakeri* | Whorl | 27 | 05/06/2023 | Moderate | 22 | 5 | 2.0 | 208 | Paired | 155 | 0.7 | -0.00003 | 0.00007 | -0.00010 | -14.67 | -49.30 | |
| **D44-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 27 | 05/06/2023 | Anesthetized | 23 | 7 | 9.0 | 980 | Anesthetized | 352 | 2.3 | -0.00038 | -0.00003 | -0.00034 | -41.69 | -38.12 | |
| **D32-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 19 | 7/1/2022 | Low | 28 | 13 | 6.0 | 980 | Intact | 180 | 3.1 | -0.00094 | 0.00007 | -0.00101 | -157.50 | -168.93 | |
| **D48-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 29 | 05/08/2023 | Moderate | 21 | 1 | 1.0 | 208 | Paired | 147 | 2.1 | -0.00010 | 0.00057 | -0.00066 | -95.55 | -662.51 | |
| **D48-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 29 | 05/08/2023 | Moderate | 21 | 1 | 1.0 | 208 | Paired | 103 | 0.6 | 0.00026 | 0.00067 | -0.00040 | 263.60 | -402.33 | |
| **D50-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 30 | 05/09/2023 | Moderate | 17 | 4 | 2.3 | 208 | Paired | 200 | 1.6 | -0.00040 | 0.00064 | -0.00104 | -175.47 | -454.11 | |
| **D50-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 30 | 05/09/2023 | Moderate | 17 | 4 | 2.3 | 208 | Paired | 97 | 0.6 | 0.00010 | 0.00094 | -0.00084 | 44.46 | -363.55 | |
| **D50-Cpol-B-2** | *Cyclosalpa polae* | Cluster | 30 | 05/09/2023 | Low | 25 | 6 | 7.6 | 490 | Paired | 200 | 1.6 | -0.00132 | 0.00064 | -0.00196 | -173.30 | -257.62 | |
| **D50-Cpol-B-2** | *Cyclosalpa polae* | Cluster | 30 | 05/09/2023 | Low | 25 | 6 | 7.6 | 490 | Paired | 97 | 0.6 | -0.00060 | 0.00094 | -0.00154 | -79.43 | -202.90 | |
| **D52-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 31 | 05/10/2023 | Moderate | 12 | 8 | 2.1 | 208 | Paired | 157 | 1.5 | -0.00038 | 0.00036 | -0.00074 | -181.94 | -352.24 | |
| **D52-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 31 | 05/10/2023 | Moderate | 12 | 8 | 2.1 | 208 | Paired | 137 | 0.7 | 0.00005 | 0.00052 | -0.00047 | 23.54 | -224.43 | |
| **D53-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 31 | 05/10/2023 | Low | 14 | 10 | 1.8 | 208 | Paired | 138 | 1.9 | -0.00026 | 0.00009 | -0.00036 | -146.33 | -197.99 | |
| **D53-Cpol-B-1** | *Cyclosalpa polae* | Cluster | 31 | 05/10/2023 | Low | 14 | 10 | 1.8 | 208 | Paired | 122 | 0.6 | -0.00015 | 0.00008 | -0.00023 | -82.84 | -129.00 | |
| **D31-Cqua-B-1** | *Cyclosalpa quadriluminis* | Whorl | 18 | 6/30/2022 | Anesthetized | 13 | 16 | 2.8 | 208 | Anesthetized | 180 | 3.0 | -0.00027 | -0.00003 | -0.00024 | -96.39 | -86.29 | |
| **D42-Cqua-B-1** | *Cyclosalpa quadriluminis* | Whorl | 25 | 9/16/2022 | Anesthetized | 28 | 5 | 28.0 | 208 | Anesthetized | 424 | 1.0 | -0.00111 | -0.00005 | -0.00105 | -39.49 | -37.67 | |
| **D25-Cqua-B-1** | *Cyclosalpa quadriluminis* | Whorl | 13 | 4/25/2022 | Moderate | 25 | 4 | 4.0 | 208 | Intact | 126 | 1.2 | -0.00060 | 0.00025 | -0.00085 | -148.82 | -212.43 | |
| **D41-Cqua-B-1** | *Cyclosalpa quadriluminis* | Whorl | 24 | 9/15/2022 | Moderate | 17 | 11 | 5.5 | 208 | Intact | 270 | 0.5 | -0.00110 | 0.00000 | -0.00110 | -199.57 | -199.85 | |
| **D45-Cqua-B-1** | *Cyclosalpa quadriluminis* | Whorl | 27 | 05/06/2023 | Active | 35 | 6 | 15.0 | 490 | Intact | 228 | 1.4 | -0.00495 | -0.00029 | -0.00466 | -330.02 | -310.82 | |
| **D51-Cqua-B-1** | *Cyclosalpa quadriluminis* | Whorl | 30 | 05/09/2023 | Anesthetized | 29 | 8 | 21.0 | 490 | Paired | 187 | 1.2 | -0.00088 | 0.00005 | -0.00093 | -41.91 | -44.24 | |
| **D28-Csew-B-1** | *Cyclosalpa sewelli* | Cluster | 15 | 6/27/2022 | Anesthetized | 12 | 10 | 2.4 | 208 | Anesthetized | 150 | 1.7 | 0.00001 | 0.00008 | -0.00007 | 2.96 | -29.50 | |
| **D28-Csew-B-2** | *Cyclosalpa sewelli* | Cluster | 15 | 6/27/2022 | Anesthetized | 8 | 16 | 2.5 | 208 | Anesthetized | 150 | 1.7 | 0.00000 | 0.00008 | -0.00008 | 0.57 | -30.59 | |
| **D39-Csew-B-1** | *Cyclosalpa sewelli* | Cluster | 23 | 9/14/2022 | Anesthetized | 9 | 15 | 1.3 | 208 | Anesthetized | 240 | 0.8 | 0.00013 | 0.00009 | 0.00004 | 100.58 | 31.56 | |
| **D15-CPol-B-1** | *Cyclosalpa sewelli* | Cluster | 8 | 4/19/2022 | Moderate | 15 | 7 | 4.4 | 208 | Intact | 123 | 1.5 | -0.00004 | 0.00010 | -0.00014 | -9.75 | -32.93 | |
| **D23-Cpol-B-1** | *Cyclosalpa sewelli* | Cluster | 12 | 4/24/2022 | Moderate | 35 | 1 | 2.4 | 208 | Intact | 123 | 1.1 | -0.00025 | 0.00007 | -0.00032 | -102.22 | -133.20 | |
| **D4-Csew-B-1** | *Cyclosalpa sewelli* | Cluster | 2 | 9/19/2021 | Low | 20 | 1 | 10.5 | 208 | Intact | 60 | NA | -0.00001 | 0.00049 | -0.00050 | -1.32 | -47.35 | |
| **D9-Csew-B-1** | *Cyclosalpa sewelli* | Cluster | 5 | 9/21/2021 | Moderate | 25 | 4 | 13.6 | 208 | Intact | 360 | 1.6 | -0.00057 | -0.00006 | -0.00051 | -42.01 | -37.36 | |
| **D9-Csew-B-2** | *Cyclosalpa sewelli* | Cluster | 5 | 9/21/2021 | Moderate | 25 | 6 | 13.9 | 208 | Intact | 360 | 1.6 | -0.00069 | -0.00006 | -0.00062 | -49.20 | -44.65 | |
| **D9-Csew-B-3** | *Cyclosalpa sewelli* | Cluster | 5 | 9/21/2021 | Moderate | 20 | 2 | 10.7 | 208 | Intact | 360 | 1.6 | -0.00027 | -0.00006 | -0.00021 | -25.47 | -19.55 | |
| **D9-Csew-B-4** | *Cyclosalpa sewelli* | Cluster | 5 | 9/21/2021 | Moderate | 25 | 1 | 13.1 | 208 | Intact | 360 | 1.6 | -0.00025 | -0.00006 | -0.00018 | -18.86 | -14.04 | |
| **D29-Csew-B-1** | *Cyclosalpa sewelli* | Cluster | 16 | 6/28/2022 | Moderate | 19 | 5 | 4.5 | 208 | Paired | 120 | 2.2 | -0.00028 | 0.00006 | -0.00034 | -61.63 | -75.50 | |
| **D29-Csew-B-1** | *Cyclosalpa sewelli* | Cluster | 16 | 6/28/2022 | Moderate | 19 | 5 | 4.5 | 208 | Paired | 90 | 0.2 | -0.00033 | -0.00002 | -0.00031 | -72.41 | -68.15 | |
| **D43-Hvir-B-1** | *Helicosalpa virgula* | Helical | 26 | 9/16/2022 | Moderate | 12 | 68 | 13.0 | 980 | Intact | 312 | 0.5 | -0.00328 | -0.00004 | -0.00324 | -252.24 | -249.06 | |
| **D54-Hvir-B-1** | *Helicosalpa virgula* | Helical | 31 | 05/10/2023 | Moderate | 16 | 64 | 16.5 | 980 | Paired | 138 | 1.9 | -0.00401 | 0.00009 | -0.00410 | -242.74 | -248.37 | |
| **D54-Hvir-B-1** | *Helicosalpa virgula* | Helical | 31 | 05/10/2023 | Moderate | 16 | 64 | 16.5 | 980 | Paired | 122 | 0.6 | -0.00061 | 0.00008 | -0.00069 | -36.93 | -41.97 | |
| **D30-Icyl-B-1** | *Iasis cylindrica* | Linear | 17 | 6/29/2022 | Anesthetized | 11 | 9 | 12.0 | 208 | Anesthetized | 142 | 0.9 | -0.00007 | 0.00002 | -0.00009 | -6.06 | -7.34 | |
| **D32-Icyl-B-1** | *Iasis cylindrica* | Linear | 19 | 7/1/2022 | Anesthetized | 6 | 26 | 0.1 | 208 | Anesthetized | 180 | 3.1 | 0.00013 | 0.00007 | 0.00006 | 1312.38 | 626.67 | |
| **D33-Icyl-B-1** | *Iasis cylindrica* | Linear | 20 | 9/11/2022 | Anesthetized | 6 | 11 | 0.3 | 208 | Anesthetized | 180 | 1.8 | 0.00016 | 0.00025 | -0.00009 | 533.71 | -303.83 | |
| **D11-WC-B-1** | *Iasis cylindrica* | Linear | 6 | 9/22/2021 | Very active | 15 | 12 | 9.7 | 208 | Intact | 295 | 2.3 | -0.00113 | -0.00002 | -0.00111 | -116.62 | -114.55 | |
| **D14-WC-B-1A** | *Iasis cylindrica* | Linear | 7 | 9/23/2021 | Very active | 10 | 20 | 8.3 | 208 | Intact | 246 | 3.9 | -0.00141 | -0.00014 | -0.00127 | -168.66 | -152.14 | |
| **D14-WC-B-1B** | *Iasis cylindrica* | Linear | 7 | 9/23/2021 | Very active | 10 | 28 | 9.6 | 208 | Intact | 246 | 3.9 | -0.00213 | -0.00014 | -0.00199 | -221.66 | -207.31 | |
| **D14-WC-B-2** | *Iasis cylindrica* | Linear | 7 | 9/23/2021 | Very active | 10 | 34 | 10.5 | 208 | Intact | 30 | 2.0 | -0.00312 | 0.00010 | -0.00322 | -295.85 | -304.95 | |
| **D14-WC-B-3** | *Iasis cylindrica* | Linear | 7 | 9/23/2021 | Very active | 10 | 34 | 10.5 | 208 | Intact | 105 | 0.8 | -0.00261 | -0.00025 | -0.00236 | -247.82 | -224.19 | |
| **D14-WC-B-4** | *Iasis cylindrica* | Linear | 7 | 9/23/2021 | Very active | 10 | 34 | 10.5 | 208 | Intact | 156 | 1.6 | -0.00184 | -0.00006 | -0.00178 | -174.65 | -168.79 | |
| **D21-Icyl-B-1** | *Iasis cylindrica* | Linear | 11 | 4/22/2022 | Moderate | 7 | 21 | 1.3 | 208 | Intact | 150 | 1.2 | -0.00016 | 0.00006 | -0.00021 | -121.33 | -163.75 | |
| **D21-Icyl-B-2A** | *Iasis cylindrica* | Linear | 11 | 4/22/2022 | Very active | 15 | 28 | 6.0 | 980 | Intact | 150 | 1.2 | -0.00173 | 0.00006 | -0.00179 | -289.10 | -298.29 | |
| **D21-Icyl-B-2B** | *Iasis cylindrica* | Linear | 11 | 4/22/2022 | Very active | 15 | 15 | 3.0 | 980 | Intact | 150 | 1.2 | -0.00011 | 0.00006 | -0.00016 | -36.30 | -54.68 | |
| **D23-Icyl-B-1** | *Iasis cylindrica* | Linear | 12 | 4/24/2022 | Active | 15 | 44 | 14.1 | 980 | Intact | 123 | 1.1 | -0.00318 | 0.00007 | -0.00326 | -225.69 | -230.96 | |
| **D32-Icyl-B2** | *Iasis cylindrica* | Linear | 19 | 7/1/2022 | Active | 7 | 76 | 0.5 | 208 | Intact | 180 | 3.1 | -0.00064 | 0.00007 | -0.00071 | -1277.71 | -1414.86 | |
| **D41-Icyl-B-1** | *Iasis cylindrica* | Linear | 24 | 9/15/2022 | Active | 10 | 10 | 1.5 | 208 | Paired | 105 | 0.2 | -0.00055 | 0.00004 | -0.00059 | -367.28 | -395.82 | |
| **D41-Icyl-B-1** | *Iasis cylindrica* | Linear | 24 | 9/15/2022 | Active | 10 | 10 | 1.5 | 208 | Paired | 115 | 0.2 | -0.00030 | -0.00001 | -0.00029 | -199.35 | -190.74 | |
| **D48-Ipun-B-1** | *Ihlea punctata* | Linear | 29 | 05/08/2023 | Moderate | 12 | 68 | 3.7 | 980 | Paired | 147 | 2.1 | -0.00521 | 0.00057 | -0.00578 | -1407.69 | -1560.92 | |
| **D48-Ipun-B-1** | *Ihlea punctata* | Linear | 29 | 05/08/2023 | Moderate | 12 | 68 | 3.7 | 980 | Paired | 103 | 0.6 | 0.00035 | 0.00067 | -0.00032 | 94.70 | -85.28 | |
| **D39-Mhex-B-1** | *Metcalfina hexagona* | Linear | 23 | 9/14/2022 | Anesthetized | 28 | 16 | 22.0 | 980 | Anesthetized | 240 | 0.8 | -0.00104 | 0.00077 | -0.00180 | -47.07 | -81.93 | |
| **D27-Pcon-B-1** | *Pegea sp.* | Transversal | 14 | 6/26/2022 | Anesthetized | 28 | 2 | 3.5 | 208 | Anesthetized | 120 | 2.0 | -0.00006 | 0.00004 | -0.00010 | -18.15 | -28.70 | |
| **D30-Pco-B-1** | *Pegea sp.* | Transversal | 17 | 6/29/2022 | Anesthetized | 36 | 5 | 15.0 | 980 | Anesthetized | 142 | 0.9 | 0.00021 | 0.00002 | 0.00020 | 14.32 | 13.30 | |
| **D35-Pcon-B-1** | *Pegea sp.* | Transversal | 21 | 9/12/2022 | Anesthetized | 35 | 8 | 23.0 | 980 | Anesthetized | 200 | 5.1 | -0.00153 | 0.00012 | -0.00165 | -66.65 | -71.95 | |
| **D37-Pcon-B-1** | *Pegea sp.* | Transversal | 22 | 9/13/2022 | Anesthetized | 60 | 12 | 80.0 | 980 | Anesthetized | 180 | 0.3 | -0.00920 | 0.00003 | -0.00923 | -115.01 | -115.42 | |
| **D19-Pso-B-1** | *Pegea sp.* | Transversal | 10 | 4/21/2022 | Moderate | 80 | 5 | 65.0 | 980 | Intact | 120 | 1.2 | -0.01312 | 0.00026 | -0.01338 | -201.78 | -205.81 | |
| **D19-Pso-B-2** | *Pegea sp.* | Transversal | 10 | 4/21/2022 | Moderate | 65 | 5 | 50.0 | 980 | Intact | 120 | 1.2 | -0.01116 | 0.00026 | -0.01142 | -223.24 | -228.48 | |
| **D19-Pso-B-3** | *Pegea sp.* | Transversal | 10 | 4/21/2022 | Moderate | 65 | 1 | 18.0 | 208 | Intact | 120 | 1.2 | -0.00168 | 0.00026 | -0.00195 | -93.56 | -108.10 | |
| **D23-Pso-B-1** | *Pegea sp.* | Transversal | 12 | 4/24/2022 | Moderate | 30 | 22 | 44.0 | 980 | Intact | 123 | 1.1 | -0.00704 | 0.00007 | -0.00712 | -160.07 | -161.76 | |
| **D25-Pso-B-1** | *Pegea sp.* | Transversal | 13 | 4/25/2022 | Active | 42 | 7 | 35.0 | 980 | Intact | 126 | 1.2 | -0.00269 | 0.00176 | -0.00444 | -76.73 | -126.97 | |
| **D31-Pcon-B-2** | *Pegea sp.* | Transversal | 18 | 6/30/2022 | Moderate | 41 | 3 | 9.0 | 980 | Intact | 180 | 3.0 | -0.00115 | -0.00003 | -0.00113 | -128.33 | -125.19 | |
| **D5-PC-B-1** | *Pegea sp.* | Transversal | 3 | 9/19/2021 | Moderate | 25 | 5 | 13.8 | 208 | Intact | 259 | NA | -0.00042 | -0.00001 | -0.00042 | -30.76 | -30.39 | |
| **D46-Psp-B-1** | *Pegea sp.* | Transversal | 28 | 05/07/2023 | Moderate | 12 | 87 | 4.9 | 490 | Paired | 243 | 1.3 | -0.00170 | 0.00015 | -0.00185 | -347.02 | -377.14 | |
| **D46-Psp-B-1** | *Pegea sp.* | Transversal | 28 | 05/07/2023 | Moderate | 12 | 87 | 4.9 | 490 | Paired | 74 | 0.4 | -0.00073 | 0.00017 | -0.00090 | -149.42 | -184.55 | |
| **D52-Psp-B-1** | *Pegea sp.* | Transversal | 31 | 05/10/2023 | Low | 43 | 8 | 18.0 | 980 | Paired | 157 | 1.5 | -0.00561 | 0.00036 | -0.00597 | -311.81 | -331.67 | |
| **D52-Psp-B-1** | *Pegea sp.* | Transversal | 31 | 05/10/2023 | Low | 43 | 8 | 18.0 | 980 | Paired | 137 | 0.7 | 0.00015 | 0.00052 | -0.00037 | 8.11 | -20.82 | |
| **D30-Ramb-B-1** | *Ritteriella amboinensis* | Bipinnate | 17 | 6/29/2022 | Anesthetized | 18 | 3 | 1.5 | 208 | Anesthetized | 142 | 0.9 | 0.00010 | 0.00002 | 0.00008 | 66.31 | 56.09 | |
| **D30-Ramb-B-2** | *Ritteriella amboinensis* | Bipinnate | 17 | 6/29/2022 | Anesthetized | 15 | 5 | 0.8 | 208 | Anesthetized | 142 | 0.9 | 0.00010 | 0.00002 | 0.00008 | 124.46 | 105.29 | |
| **D30-Ramb-B-4** | *Ritteriella amboinensis* | Bipinnate | 17 | 6/29/2022 | Anesthetized | 22 | 38 | 6.3 | 980 | Anesthetized | 142 | 0.9 | -0.00036 | 0.00002 | -0.00037 | -56.69 | -59.13 | |
| **D23-Ramb-B-1** | *Ritteriella amboinensis* | Bipinnate | 12 | 4/24/2022 | Moderate | 40 | 23 | 40.0 | 208 | Intact | 123 | 1.1 | -0.00164 | 0.00007 | -0.00171 | -40.95 | -42.81 | |
| **D27-Ramb-B-1** | *Ritteriella amboinensis* | Bipinnate | 14 | 6/26/2022 | Moderate | 28 | 10 | 3.5 | 208 | Intact | 120 | 2.0 | -0.00009 | 0.00004 | -0.00012 | -24.44 | -34.99 | |
| **D27-Ramb-B-2** | *Ritteriella amboinensis* | Bipinnate | 14 | 6/26/2022 | Moderate | 15 | 5 | 2.5 | 208 | Intact | 120 | 2.0 | -0.00003 | 0.00004 | -0.00006 | -10.79 | -25.57 | |
| **D30-Ramb-B-3** | *Ritteriella amboinensis* | Bipinnate | 17 | 6/29/2022 | Moderate | 17 | 5 | 1.4 | 208 | Intact | 142 | 0.9 | -0.00002 | 0.00002 | -0.00004 | -17.68 | -28.64 | |
| **D47-Rret-B-1** | *Ritteriella retracta* | Bipinnate | 28 | 05/07/2023 | Moderate | 31 | 2 | 1.2 | 208 | Paired | 133 | 0.6 | -0.00095 | -0.00134 | 0.00039 | -789.91 | 323.08 | |
| **D47-Rret-B-1** | *Ritteriella retracta* | Bipinnate | 28 | 05/07/2023 | Moderate | 31 | 2 | 1.2 | 208 | Paired | 115 | 0.4 | -0.00012 | -0.00051 | 0.00039 | -95.94 | 328.64 | |
| **D50-Rret-B-1** | *Ritteriella retracta* | Bipinnate | 30 | 05/09/2023 | Low | 31 | 8 | 7.8 | 980 | Paired | 200 | 1.6 | -0.00161 | 0.00064 | -0.00225 | -205.81 | -287.97 | |
| **D50-Rret-B-1** | *Ritteriella retracta* | Bipinnate | 30 | 05/09/2023 | Low | 31 | 8 | 7.8 | 980 | Paired | 97 | 0.6 | 0.00063 | 0.00094 | -0.00030 | 81.28 | -39.03 | |
| **D22-Rsp-B-1** | *Ritteriella retracta* | Bipinnate | 20 | 9/11/2022 | Anesthetized | 25 | 25 | 11.0 | 980 | Anesthetized | 180 | 1.8 | -0.00026 | 0.00025 | -0.00051 | -23.75 | -46.59 | |
| **D37-Rsp-B-1** | *Ritteriella retracta* | Bipinnate | 22 | 9/13/2022 | Anesthetized | 57 | 8 | 63.0 | 980 | Anesthetized | 180 | 0.3 | -0.00456 | 0.00003 | -0.00460 | -72.43 | -72.95 | |
| **D25-Rsp-B-1** | *Ritteriella retracta* | Bipinnate | 21 | 9/12/2022 | Moderate | 33 | 14 | 18.2 | 980 | Intact | 200 | 5.1 | -0.00216 | 0.00010 | -0.00225 | -118.46 | -123.69 | |
| **D32-Rsp-B-1** | *Ritteriella retracta* | Bipinnate | 19 | 7/1/2022 | Moderate | 30 | 55 | 34.0 | 980 | Intact | 180 | 3.1 | -0.01511 | 0.00007 | -0.01518 | -444.36 | -446.38 | |
| **D28-Sasp-B-2** | *Salpa aspera* | Linear | 15 | 6/27/2022 | Anesthetized | 22 | 57 | 16.5 | 980 | Anesthetized | 150 | 1.7 | -0.00152 | 0.00008 | -0.00159 | -91.90 | -96.62 | |
| **D32-Sasp-B-1** | *Salpa aspera* | Linear | 19 | 7/1/2022 | Anesthetized | 28 | 9 | 6.0 | 208 | Anesthetized | 180 | 3.1 | -0.00104 | 0.00007 | -0.00111 | -174.16 | -185.59 | |
| **D27-Sasp-B-1** | *Salpa aspera* | Linear | 14 | 6/26/2022 | Active | 45 | 3 | 8.0 | 980 | Intact | 120 | 2.0 | 0.00100 | 0.00004 | 0.00097 | 125.43 | 120.82 | |
| **D27-Sasp-B-2** | *Salpa aspera* | Linear | 14 | 6/26/2022 | Active | 39 | 13 | 15.5 | 980 | Intact | 120 | 2.0 | -0.00648 | 0.00004 | -0.00652 | -418.10 | -420.48 | |
| **D28-Sasp-B-1** | *Salpa aspera* | Linear | 15 | 6/27/2022 | Active | 20 | 10 | 3.3 | 208 | Intact | 150 | 1.7 | -0.00064 | 0.00008 | -0.00072 | -195.33 | -218.93 | |
| **D49-Sasp-B-1** | *Salpa aspera* | Linear | 29 | 05/08/2023 | Moderate | 38 | 5 | 5.4 | 980 | Paired | 135 | 1.7 | -0.00179 | 0.00034 | -0.00214 | -332.12 | -395.96 | |
| **D49-Sasp-B-1** | *Salpa aspera* | Linear | 29 | 05/08/2023 | Moderate | 38 | 5 | 5.4 | 980 | Paired | 70 | 0.5 | -0.00042 | 0.00014 | -0.00056 | -78.48 | -104.23 | |
| **D33-Sfus-B-1** | *Salpa fusiformis* | Linear | 20 | 9/11/2022 | Anesthetized | 28 | 3 | 1.0 | 208 | Anesthetized | 180 | 1.8 | 0.00017 | 0.00025 | -0.00008 | 166.95 | -84.31 | |
| **D35-Sfus-B-1** | *Salpa fusiformis* | Linear | 21 | 9/12/2022 | Anesthetized | 15 | 13 | 1.6 | 208 | Anesthetized | 200 | 5.1 | -0.00013 | 0.00012 | -0.00026 | -83.57 | -159.71 | |
| **D39-Sfus-B-1** | *Salpa fusiformis* | Linear | 23 | 9/14/2022 | Anesthetized | 13 | 16 | 1.0 | 208 | Anesthetized | 240 | 0.8 | 0.00011 | 0.00009 | 0.00002 | 111.99 | 22.27 | |
| **D27-Sfus-B-1** | *Salpa fusiformis* | Linear | 14 | 6/26/2022 | Moderate | 15 | 5 | 1.6 | 208 | Intact | 120 | 2.0 | -0.00006 | 0.00004 | -0.00009 | -35.03 | -58.11 | |
| **D28-Sfus-B1** | *Salpa fusiformis* | Linear | 15 | 6/27/2022 | Active | 12 | 19 | 1.8 | 980 | Intact | 150 | 1.7 | 0.00035 | 0.00008 | 0.00027 | 192.01 | 148.73 | |
| **D33-Sfus-B-2** | *Salpa fusiformis* | Linear | 20 | 9/11/2022 | Moderate | 27 | 11 | 5.5 | 208 | Intact | 180 | 1.8 | -0.00104 | 0.00025 | -0.00129 | -188.46 | -234.15 | |
| **D53-Sfus-B-1** | *Salpa fusiformis* | Linear | 31 | 05/10/2023 | Active | 14 | 24 | 2.0 | 980 | Paired | 138 | 1.9 | -0.00024 | 0.00009 | -0.00034 | -122.15 | -168.65 | |
| **D53-Sfus-B-1** | *Salpa fusiformis* | Linear | 31 | 05/10/2023 | Active | 14 | 24 | 2.0 | 980 | Paired | 122 | 0.6 | 0.00002 | 0.00008 | -0.00007 | 8.81 | -32.73 | |
| **D29-Smax-B-1a** | *Salpa maxima* | Linear | 16 | 6/28/2022 | Anesthetized | 115 | 3 | 55.0 | 980 | Anesthetized | 120 | 2.2 | -0.00268 | 0.00006 | -0.00274 | -48.70 | -49.84 | |
| **D37-Smax-B-1** | *Salpa maxima* | Linear | 22 | 9/13/2022 | Anesthetized | 70 | 1 | 7.0 | 208 | Anesthetized | 180 | 0.3 | 0.00099 | 0.00003 | 0.00096 | 141.67 | 137.02 | |
| **D41-Smax-B-1** | *Salpa maxima* | Linear | 24 | 9/15/2022 | Anesthetized | 65 | 3 | 17.0 | 980 | Anesthetized | 270 | 0.5 | -0.00264 | 0.00000 | -0.00264 | -155.19 | -155.28 | |
| **D45-Smax-B-1** | *Salpa maxima* | Linear | 27 | 05/06/2023 | Anesthetized | 47 | 9 | 18.0 | 980 | Anesthetized | 228 | 1.4 | -0.00212 | -0.00029 | -0.00183 | -117.64 | -101.65 | |
| **D31-Smax-B-2** | *Salpa maxima* | Linear | 18 | 6/30/2022 | Moderate | 80 | 3 | 20.0 | 980 | Intact | 180 | 3.0 | -0.00422 | -0.00003 | -0.00420 | -211.17 | -209.75 | |
| **D33-Smax-B-1** | *Salpa maxima* | Linear | 20 | 9/11/2022 | Moderate | 100 | 5 | 32.5 | 980 | Intact | 180 | 1.8 | -0.01118 | 0.00025 | -0.01143 | -343.97 | -351.70 | |
| **D41-Smax-B-2** | *Salpa maxima* | Linear | 24 | 9/15/2022 | Moderate | 110 | 1 | 20.0 | 980 | Intact | 270 | 0.5 | -0.00567 | 0.00000 | -0.00568 | -283.73 | -283.81 | |
| **D29-Smax-B-1b** | *Salpa maxima* | Linear | 16 | 6/28/2022 | Active | 115 | 4 | 53.0 | 980 | Paired | 120 | 2.2 | -0.01375 | 0.00006 | -0.01382 | -259.48 | -260.66 | |
| **D29-Smax-B-1b** | *Salpa maxima* | Linear | 16 | 6/28/2022 | Active | 115 | 4 | 53.0 | 980 | Paired | 90 | 0.2 | -0.00555 | -0.00002 | -0.00553 | -104.78 | -104.42 | |
| **D37-Szon-B-1** | *Soestia zonaria* | Linear | 22 | 9/13/2022 | Active | 21 | 9 | 5.4 | 208 | Intact | 0 | 0.0 | NA | NA | NA | NA | NA | |
| **D37-Szon-B-2** | *Soestia zonaria* | Linear | 22 | 9/13/2022 | Active | 21 | 9 | 5.4 | 208 | Intact | 0 | 0.0 | NA | NA | NA | NA | NA | |
| **D37-Szon-B-3** | *Soestia zonaria* | Linear | 22 | 9/13/2022 | Active | 21 | 9 | 5.4 | 208 | Intact | 0 | 0.0 | NA | NA | NA | NA | NA | |
| **D37-Szon-B-4** | *Soestia zonaria* | Linear | 22 | 9/13/2022 | Active | 21 | 9 | 5.4 | 208 | Intact | 0 | 0.0 | NA | NA | NA | NA | NA | |
| **D37-Szon-B-5** | *Soestia zonaria* | Linear | 22 | 9/13/2022 | Active | 21 | 9 | 5.4 | 208 | Intact | 0 | 0.0 | NA | NA | NA | NA | NA | |
| **D37-Szon-B-6** | *Soestia zonaria* | Linear | 22 | 9/13/2022 | Active | 21 | 9 | 5.4 | 208 | Intact | 0 | 0.0 | NA | NA | NA | NA | NA | |
| **D29-Szon-B-1** | *Soestia zonaria* | Linear | 16 | 6/28/2022 | Active | 7 | 9 | 0.7 | 208 | Paired | 120 | 2.2 | -0.00003 | 0.00006 | -0.00010 | -49.52 | -138.67 | |
| **D29-Szon-B-1** | *Soestia zonaria* | Linear | 16 | 6/28/2022 | Active | 7 | 9 | 0.7 | 208 | Paired | 90 | 0.2 | -0.00012 | -0.00002 | -0.00010 | -168.38 | -140.95 | |
| **D47-Szon-B-1** | *Soestia zonaria* | Linear | 28 | 05/07/2023 | Active | 24 | 10 | 4.0 | 490 | Paired | 133 | 0.6 | -0.00278 | -0.00134 | -0.00144 | -694.72 | -360.83 | |
| **D47-Szon-B-1** | *Soestia zonaria* | Linear | 28 | 05/07/2023 | Active | 24 | 10 | 4.0 | 490 | Paired | 115 | 0.4 | -0.00041 | -0.00051 | 0.00010 | -101.81 | 25.56 | |
| **D50-Tcic-B-1** | *Thalia cicar* | Oblique | 30 | 05/09/2023 | Low | 6 | 12 | 0.1 | 208 | Paired | 200 | 1.6 | -0.00028 | 0.00064 | -0.00092 | -2771.86 | -9180.62 | |
| **D50-Tcic-B-1** | *Thalia cicar* | Oblique | 30 | 05/09/2023 | Low | 6 | 12 | 0.1 | 208 | Paired | 97 | 0.6 | 0.00009 | 0.00094 | -0.00085 | 887.68 | -8496.46 | |
| **D53-Tcic-B-1** | *Thalia cicar* | Oblique | 31 | 05/10/2023 | Low | 6 | 37 | 0.3 | 208 | Paired | 138 | 1.9 | -0.00012 | 0.00009 | -0.00021 | -388.90 | -698.90 | |
| **D53-Tcic-B-1** | *Thalia cicar* | Oblique | 31 | 05/10/2023 | Low | 6 | 37 | 0.3 | 208 | Paired | 122 | 0.6 | -0.00003 | 0.00008 | -0.00011 | -99.76 | -376.74 | |
| **D42-Tlon-B-1** | *Thalia sp.* | Oblique | 25 | 9/16/2022 | Low | 9 | 7 | 0.8 | 208 | Intact | 424 | 1.0 | -0.00005 | -0.00005 | 0.00000 | -59.23 | 4.47 | |
| **D46-Tlon-B-1** | *Thalia sp.* | Oblique | 28 | 05/07/2023 | Low | 5 | 20 | 0.3 | 208 | Paired | 243 | 1.3 | -0.00011 | 0.00015 | -0.00026 | -379.87 | -871.81 | |
| **D46-Tlon-B-1** | *Thalia sp.* | Oblique | 28 | 05/07/2023 | Low | 5 | 20 | 0.3 | 208 | Paired | 74 | 0.4 | -0.00000 | 0.00017 | -0.00017 | -0.00 | -573.79 | |
| **D46-Tlon-B-2** | *Thalia sp.* | Oblique | 28 | 05/07/2023 | Low | 4 | 20 | 0.2 | 208 | Paired | 243 | 1.3 | -0.00004 | 0.00015 | -0.00018 | -178.77 | -916.69 | |
| **D46-Tlon-B-2** | *Thalia sp.* | Oblique | 28 | 05/07/2023 | Low | 4 | 20 | 0.2 | 208 | Paired | 74 | 0.4 | -0.00008 | 0.00017 | -0.00025 | -390.38 | -1251.06 | |
| **D48-Tlon-B-1** | *Thalia sp.* | Oblique | 29 | 05/08/2023 | Low | 5 | 19 | 0.3 | 208 | Paired | 147 | 2.1 | 0.00007 | 0.00057 | -0.00050 | 228.56 | -1661.29 | |
| **D48-Tlon-B-1** | *Thalia sp.* | Oblique | 29 | 05/08/2023 | Low | 5 | 19 | 0.3 | 208 | Paired | 103 | 0.6 | 0.00036 | 0.00067 | -0.00030 | 1216.12 | -1003.64 | |
| **D49-Tlon-B-1** | *Thalia sp.* | Oblique | 29 | 05/08/2023 | Low | 6 | 15 | 0.3 | 208 | Paired | 135 | 1.7 | 0.00009 | 0.00034 | -0.00025 | 308.97 | -840.09 | |
| **D49-Tlon-B-1** | *Thalia sp.* | Oblique | 29 | 05/08/2023 | Low | 6 | 15 | 0.3 | 208 | Paired | 70 | 0.5 | 0.00003 | 0.00014 | -0.00011 | 93.69 | -369.82 | |

A graph of different colored dots

Description automatically generated

Figure S1. Distribution of salp colony absolute (A) and zooid size-corrected (B) swimming speed across pulsation rates. Lines represent linear regressions with a 95% confidence interval shaded in grey.

A graph of different colored dots

Description automatically generated with medium confidence

Figure S2. Distribution of salp colony absolute (A) and pulsation rate-corrected (B) swimming speed (specimen means with standard errors) across zooid sizes. Lines represent linear regressions with a 95% confidence interval shaded in grey.

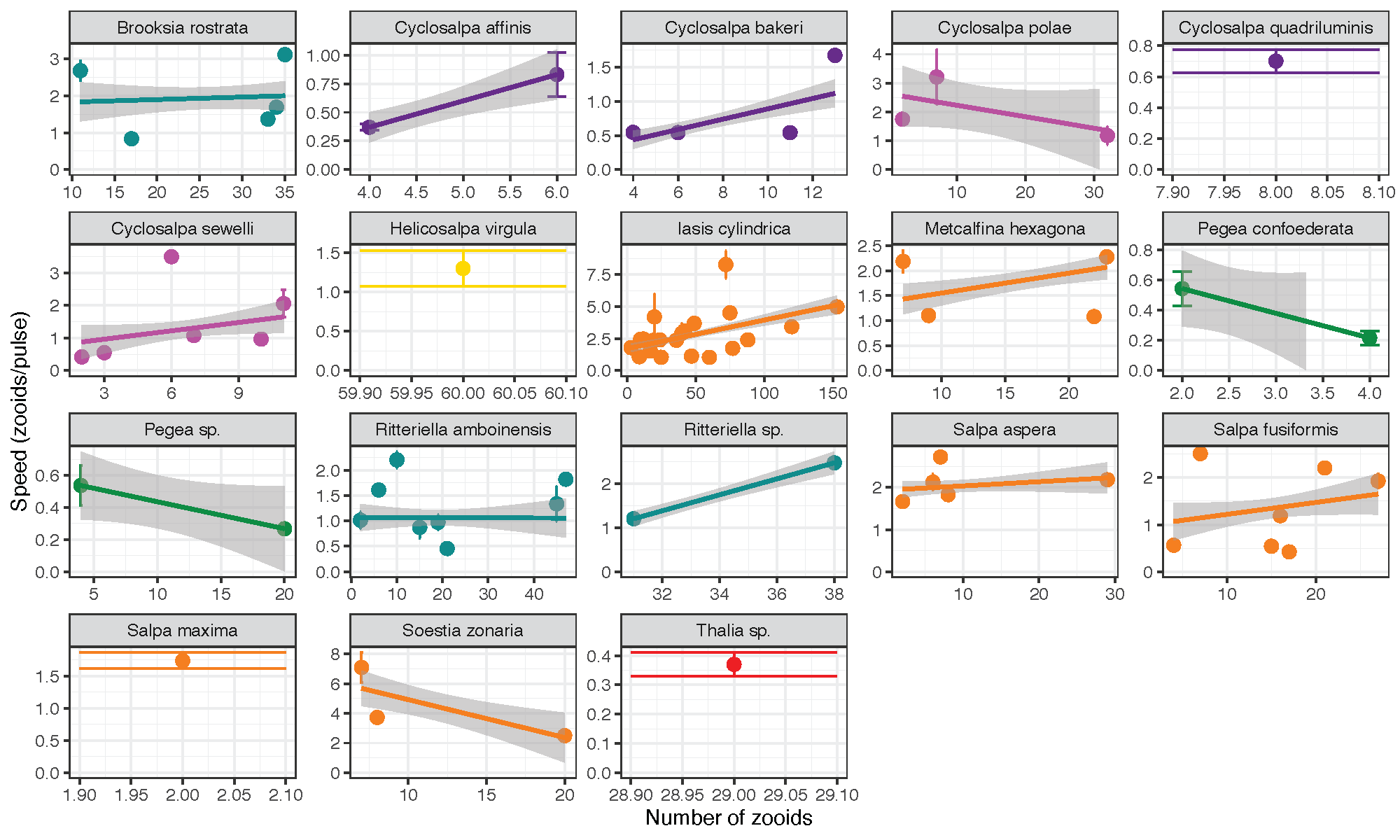


Figure S3 – Linear relationships between relative swimming speed (zooid lengths per pulsation, specimen means with standard errors) and number of zooids in the colony across each salp species. Gray areas represent the 95% confidence intervals of the linear regressions.

A graph of different colored lines

Description automatically generated with medium confidence

Figure S4. Linear relationships between relative swimming speed (zooid lengths per pulsation, specimen mean with standard errors) and number of zooids in the colony across each colonial architecture. Gray areas represent the 95% confidence intervals of the linear regressions.

A graph with different colored squares

Description automatically generated

Figure S5. Biovolume-normalized respiration rates of swimming (red) and anesthetized (blue) salp colonies across different species.

A graph with different colored bars

Description automatically generated

Figure S6. Percentage of the swimming respiration rates matched by the mean anesthetized respiration rate for each salp species. Bars represent species means with black lines representing standard errors. Colors indicate colonial architecture.

A graph with colored lines and dots

Description automatically generated

Figure S7. Percentage of the swimming respiration rates matched by the mean anesthetized respiration rate for each salp species (mean points with standard error bars) across species mean observed swimming pulsation rate derived from video data.

A graph of different colored dots

Description automatically generated

Figure S8. Cost of transport (per mm in A, per zooid length in B) for each salp species across their percent swimming respiration rate matched by the species' mean anesthetized respiration rate. Point color indicates colonial architecture.

A graph of different colored dots

Description automatically generated

Figure S9. Swimming speed (in mm/s in A, and zooids/s in B) for each salp species across their percent swimming respiration rate matched by the species mean anesthetized respiration rate. Point color indicates colonial architecture.