**Antarctic sea anemone distribution, abundance and relationships with habitat composition, community structure, and anthropogenic disturbance**

Leslie A. Watson\*1, Jonathan S Stark2, Glenn Johnstone2, Erik Wapstra1 Karen Miller1,3

1School of Natural Sciences, University of Tasmania, Private bag 55, Hobart, Tasmania, 7001 Australia

2Australian Antarctic Division, 203 Channel Hwy, Kingston, Tasmania, 7050 Australia

3Australian Institute of Marine Science, 35 Stirling Hwy, Crawley, Western Australia, 6009, Australia

\*Corresponding author

Email: Leslie.Watson@utas.edu.au

Phone: +61 4 6654 8719

ORCiD - 0000-0002-3391-4533

ORCiD:

Jonathan S. Stark - 0000-0002-4268-8072

Erik Wapstra - 0000-0002-2050-8026

Supplementary Material

|  |
| --- |
| **Table 1:** Overlapping external morphological identifies used to classify sea anemones groupings at Casey Station and Davis Station, Antarctica. |
| Species | Tentacle numbers | Tentacle Shape | Colour | Size | Depth Range | References | Sea anemone grouping  |
| *Urticinopsis antarctrica* | 120-800 | Short and conical, sometimes rounded at the end | Sandy Colour | Body column = 15 cm | 6-223+m | Brueggeman (1998) | Peach sea anemones |
| *Isotealia antarctica* | 168-192 | Blunt and conical | Brown-violet or salmon | Pedal disc = 2-3cm | 15-600m | Brueggeman (1998) | Peach sea anemones |
| *Glyphoperidium bursa* | 338-551 | Long, and flexible | red | Body column = 0.7-4cm | 9-400 m | Sanamyan *et al.* (2015) | Peach sea anemones |
| *Stomphia Selaginella* | 64-68 | Stout, conical, pointed | Marbled orange and white | Body column = 3-4cm | 25-1674m | Sanamyan *et al.* (2015) | Marbled sea anemones |
| *Hormosoma scotti* | 48 (juvenile) | long, tapering, pointed | Marbled orange and white | Body column = 2.7cmBasal disc = 8 cm | 16 - 769 m | Sanamyan *et al.* (2015) | Marbled sea anemones |

Brueggeman, P. 1998. Cnidaria – Anthozoa: anemones, soft coral: Underwater field guide to Ross Island & McMurdo Sound, Antarctica. The National Science Foundation.

Sanamyan, N., Sanamyan, K. & Schories, D. 2015. Shallow water Actiniaria and Corallimorpharia (Cnidaria: Anthozoa) from King George Island, Antarctica. *Invertebrate Zoology,* **12**, 1-51.

Sample photoquadrate images of peach sea anemone group and marbled sea anemone group.



**Figure 1:** Peach sea anemone from Casey Station.



**Figure 2:** Marbled sea anemone at Davis station.