

Larvae Attempt Log

Species: Peppermint shrimp – *Lysmata wurdemanni*

Collected: July 15, 2024 @ 12:30 am

Number collected: large spawn, 300+ larvae

Location: From main display, raising in bucket B

Plan:

Setup:

- 3 gallon bucket filled to ~2.5 gallons
- 35 ppt salinity
- Low aeration (1-3 bubbles per second)
- Dim lights on 14 hour photoperiod
- External low power heater blanket, 26C

Feeding:

- 58+um copepods, newly hatched artemia, daily
- Occasional phytoplankton as needed, to barely a tint (max 25 mL)

Cleaning:

- Water change once a week

Estimated timeline:

- ~5 weeks settling time?

Log:

- July 15: Moved to bucket (already going with few food organisms)
Fed artemia, checked in an hour or so, don't appear to have eaten
Larvae appear clear with faint horizontal striping to the eye, somewhat smaller than other *Lysmata*
- July 18: Water change, still pretty good density, maybe less after day 2
- July 21: All larvae to long leg stage
Water looks somewhat cloudy, should change soon
- July 22: Water change, still seem to have most
- July 25: Noticeable reduction in numbers, but still have a couple dozen
- July 27: 30% water change
- July 29: First phyto feeding
- August 1: Water change, maybe 10 remain
Added some frozen in the evening – seemingly no interest
Saw two clinging to the airline for a minute or so
- August 2: No clinging behavior seen
- August 6: Half dozen still seen, noticeably larger and leggier
lots of temperature fluctuation last few days (24-29C)
- August 8: Lost one, 50% water change, long antennae visible, first return of landing behavior
- August 11: Lost another, first feeding of frozen food fines
5 remain, water change
- August 12: Early AM first settlement! (probably between 10pm and 1:30am)
- August 14: Lost one late morning, another seems to be trying to land
- August 15: Moved settled shrimp to in-tank box
- August 16: Lost another early morning

Moved remaining two swimming to the holding box
August 17: One more settled overnight, third not seen
August 24: First “growth molt” (probably second molt) on first settled shrimp

Notes:

28 days to first settlement, 33 days to last (second) settlement

Landing behavior seems to prefer sides – maybe add in a vertical textured wall near the start of settlement?

Prey density seems to be a primary concern, feeding several times a day, small amounts, seems to be ideal, without too many food organisms remaining at the time of the next feeding.