Copepods

Tisbe Biminiensis



Figure 1 https://www.nano-reef.com/forums/topic/276657-the-pod-farm/

Common Name(s): 'Tisbe Pods'

Type: Harpacticoid

Size: Small

Found: Benthic

Diet: Phytoplankton, Detritus, Leftover fish food[i].

Culturing: Tisbe Copepods are very easy to culture. An example culture vessel would be an old salt tub, with 1.025 SG water heated to 22°C and fed a pinch of crushed fish flakes. Change 50% monthly to maintain water quality. Lighting is not preferred.

Water Tolerances: 15°C - 28°C, 1.020 – 1.030 S.G.[i]

Benefit to reef: They perform the role of a CUC by actively feeding on diatoms and detritus, while also being a constant live food source for many species of fish.

Other Notes: These easily establish populations in reef tanks given sufficient hiding/safe spaces.

Tigriopus Californicus



Figure 2 https://www.nano-reef.com/forums/topic/276657-the-pod-farm/

Common Name(s): 'Tig Pods' 'Tigger pods'

Type: Harpacticoid

Size: Large

Found: Palegic (Nauplii), Benthic (Mature). Young larvae swim in the water column, however as they mature they return to a more benthic lifestyle with occasional free-swimming. Found in rockpools and the coast of North America.

Diet: Primarily phytoplankton. Occasionally detritus, Benthic Algae's, Leftover fish food[ii].

Culturing: Due to their wide tolerance, these can be cultured in any container as long as there is a supply of phytoplankton. E.g. An old salt bucket, old tank water, a banana peel to kickstart phytoplankton placed outside with a copepods added to start the culture. Sunlight is sufficient for the phytoplankton.

Water Tolerances: 10°C – 40°C, 1.00045 – 1.0784 S.G. [ii]

Benefit to reef: Act as a clean up crew by consuming detritus, algae's and phytoplankton. Is also a very beneficial food source to

Other Notes: These easily establish populations in reef tanks given sufficient hiding/safe spaces.

Acartia Tonsa

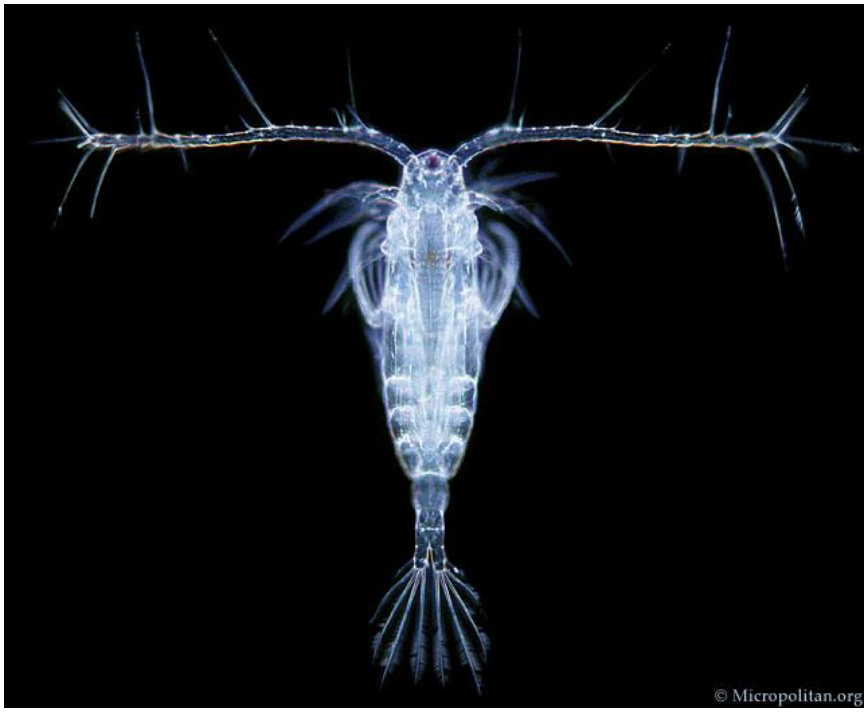


Figure 3 http://aaasjournal.org/abundance-biomass-invasive-copepod-acartia-tonsa-dana-1849-around-fish-cage-culture-southern-caspian-sea-mazandaran-kelarabad-iran/

Common Name(s):

Type: Calanoida

Size: Tiny [iii]

Found: Palegic, Found in estuaries. [iii]

Diet: Phytoplankton

Culturing: A 2l bottle with 1.025 salt water, held at room temperature. Ambient light and light aeration is preferred. Feed phytoplankton lightly where the water is only slightly tinged. Adults will eat nauplii, therefore it is preferable to separate adults and young every few weeks. A 100% water change every few weeks is recommended.[iv]

Water Tolerances: 9°C - 30°C, 1.0128 - 1.0271 SG[iii].

Benefit to reef: More beneficial as a food source as opposed to waste removal. Highly valued due to its small size and high nutritional value, it can be beneficial as a food to corals, fish, invertebrates.

Other Notes: Given sufficient hiding spaces and feeding of phytoplankton, they can maintain a population in the reef tank.

Apocyclops Panamensis



Figure 4 https://sustainableaquatics.com/feeds/sa-live-marine-copepods-apocyclops-panamensis-cyclopoid-copepods/

Common Name(s): 'Apo Pods' 'Apocalypse Pods'
Type: Cyclopodia

Size: Medium (Smaller than T. Californicus, larger than T. Biminiensis)

Found: Benthic and Palegic

Diet: Algae's such as diatoms and cyanobacteria and uneaten food.

Culturing: Culturing is relatively simple, a container with saltwater, preferable with a heater to keep the temperature stable, and fed foods such as Spirulina, Chorella and Tetrasalmus.[v]

Water Tolerances: It is highly tolerable as it is found in Estuaries in both temperate and tropical environments.[v]

Benefit to reef: Nutritious food source for fish and corals, also an effective member of clean up crew.

Other Notes:

Parvocalanus Crassirostris

Common Name(s):

Type: Calanoida

Size:

Found: Palegic[vi]

Diet:

Culturing:

Water Tolerances:

Benefit to reef:

Other Notes:

Oithona Colcarva

Common Name(s):

Type: Cyclopoida

Size: Small

Found: Palegic

Diet: Primarily bacterioplankton, picoautotrophs and microprotozooplankton.

Culturing:

Water Tolerances:

Benefit to reef: O. colcarva controls (1) bacterial blooms that follow aggressive carbon dosing, (2) phytoplankton blooms that follow nutrient spikes and (3) protozoa (e.g. Euplotes) that can cause disease in fish and/or corals.[vii]

Other Notes:

Eurytemora/Pseudodiaptomus salina

Common Name(s): 'Tangerine Pods'

Type:

Size:

Found:

Diet:

Culturing:

Water Tolerances:

Benefit to reef:

Other Notes:

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[i] https://www.nano-reef.com/forums/topic/276657-the-pod-farm/

[ii] https://www.algaebarn.com/blog/copepods/a-closer-look-at-the-harpacticoid-copepod-tigriopus-californicus/

[iii] https://www.practicalfishkeeping.co.uk/gear/review-acartia-tonsa-live-enriched-copepods-from-reefshotz/

[iv] https://seahorsebreeder.co.uk/store/en/live-zooplankton-cultures/1074-acartia-tonsa-copepods-live-lab-grade-starter-culture-200ml

[v] https://www.algaebarn.com/blog/copepods/a-closer-look-at-the-cyclopoid-copepod-apocyclops-panamensis/

[vi] https://seahorsebreeder.co.uk/store/en/live-zooplankton-cultures/1072-parvocalanus-crassirostris-copepods-live-lab-grade-starter-culture-200ml

[vii] https://www.algaebarn.com/blog/copepods/oithona-a-keystone-aquarium-copepod-species/