

# PhytoTank Set-Up Guide: Macroalgae Reactor



[www.poseidonreefsystems.com](http://www.poseidonreefsystems.com)

## **Safety, Care & Maintenance**

**\*DO NOT SUBMERGE THE PHYTOTANK\***

**The LED lighting System is not waterproof  
Avoid getting water on the PhytoTank, especially when opening  
the reactor to remove macroalgae.**

**As with all electrical aquarium equipment keep the power supply, electrical connections and the power cord away from water. Create a drip loop with your power cord to prevent water from getting into the electronics.**

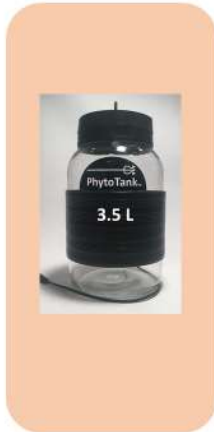
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or email us at [info@poseidonreefsystems.com](mailto:info@poseidonreefsystems.com)

# Poseidon Reef Systems Product Lines

## PhytoTank Systems



## Individual PhytoTanks



## Accessories



## Phytoplankton



# Copepod Systems

Start with a PhytoTank-CL System



- One PhytoTank for phytoplankton
- Second PhytoTank for Copepods
- Everything you need to harvest pods

Add On to your order!

Starter Cultures



Air Pumps



Culture Packs



Add 1-2 Additional PhytoTanks



Grow additional Phytoplankton or Copepod Species Simultaneously

Additional PodNests



# Phytoplankton Systems

Start with a PhytoTank System



Grow 1 Phyto Species

Add On to your order!

Starter Cultures



Air Pumps



Culture Packs



Add 1-3 Additional PhytoTanks



Grow several Phytoplankton Species Simultaneously

# Phytoplankton Storage

Seal Phytoplankton in storage pouches to backup your cultures



Storage Pouches Sold in 10 Packs



## Macroalgae Reactor



Grow macroalgae to lower phosphate in your display tank

- Start with a small clump of macroalgae
- Pump water from your sump through the reactor
- Macroalgae will grow and absorb phosphate
- Periodically remove macroalgae to make room for new growth



## Buy Now & Expand Your System Later!

### Add PhytoTanks



+



**Power Supply**  
(1 for every 4 PhytoTanks)

+



**2 & 4 Way Power Supply Splitters**

### Convert a PhytoTank to a Copepod Reactor



### Convert a PhytoTank to a Macroalgae Reactor



## Culture or Dosing

### Culture Caps: Grow Phyto



Aeration & Vent Bulkheads

### Dosing Caps: Dose Phyto



Aeration, Vent & Dosing Pump Bulkheads

Phytoplankton Systems are sold with Culture Caps

- Select a Dosing or Culture Cap When You Add Additional PhytoTanks
- Grow Phytoplankton in one PhytoTank & Dose Phytoplankton from Another PhytoTank

## Supplies



Culture Packs:

- 10 Culture Bags
- 10 Aeration Tubes
- 10 Air Vent Tubes
- 10 Disposable Pipettes

Fertilizer



Air Filters



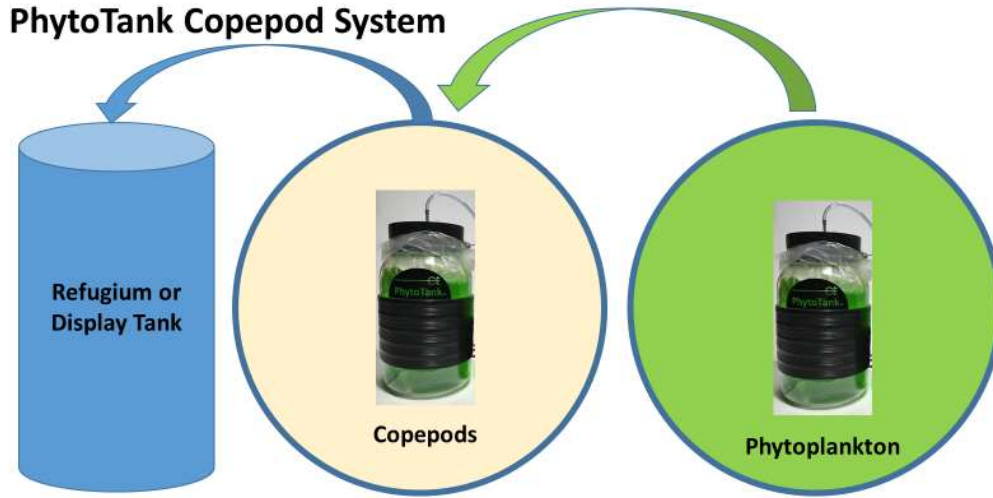
## Self-Sustaining Copepod Cultures

Copepods are an essential food source for a wide variety of reef tank inhabitants, especially mandarin gobies and other dragonettes. In addition, Tisbe pods will consume detritus and contribute to a cleaner reef tank.

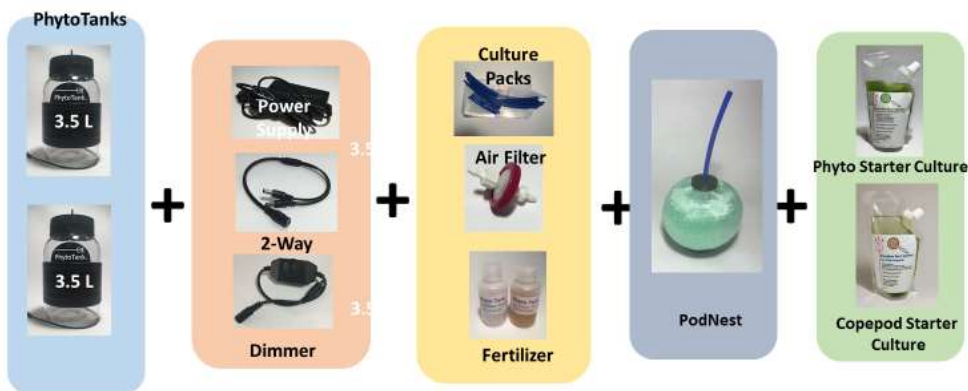
PhytoTanks make it fast & easy:  
Grow phytoplankton in one PhytoTank and then feed it to copepods growing in a second PhytoTank.

- No need for fluorescent lights
- No cleaning or disinfecting between cultures
- Spend less time fussing with improvised culture systems and more time enjoying your reef tank!

## PhytoTank Copepod System



## PhytoTank Copepod System



## PhytoTank Copepod System: Pod Nest



The Pod Nest is designed to provide a substrate for copepod infestation and simultaneously provide aeration and filtration

# PhytoTank Macroalgae Reactor

**Use Chaeto Macroalgae to remove phosphate and nitrate from your reef tank**

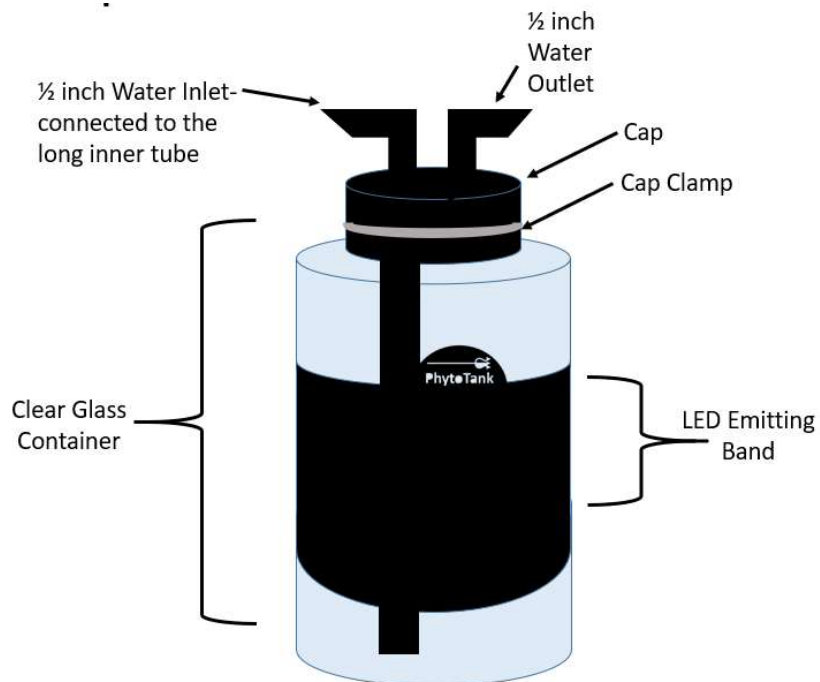
Chaeto macroalgae is a natural and effective way to remove phosphate and nitrate. Macroalgae consumes these nutrients during growth.

The PhytoTank provides an ideal environment for macroalgae growth due to the efficient lighting system.

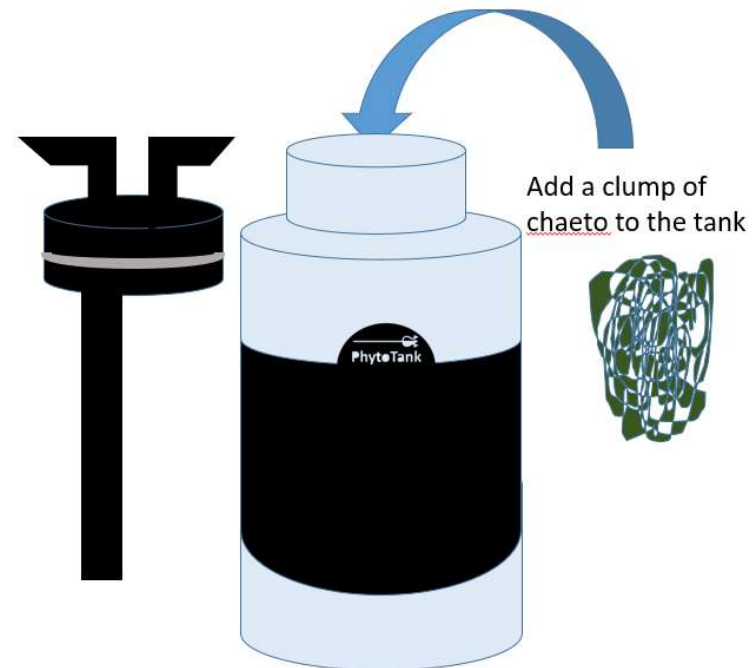
Set up the PhytoTank Chaeto reactor by installing a small pump in your sump (do not exceed 250 g/hr) that will pump water from your system, through the reactor and then back into your sump.

**\*DO NOT SUBMERGE THE PHYTOTANK! The electronics are not waterproof!**

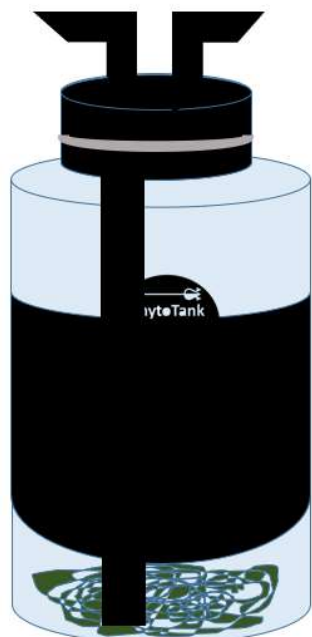




**Figure 1**



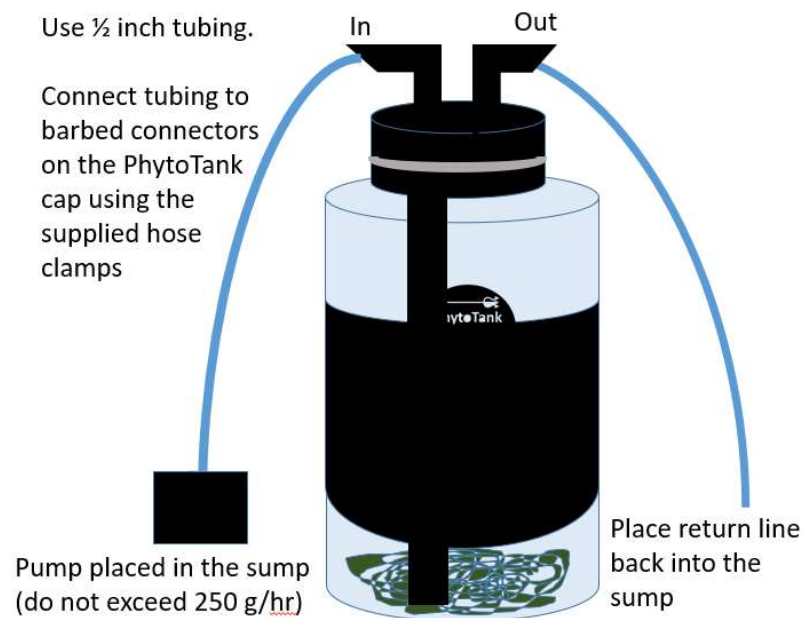
**Figure 2**



**Figure 3**

Use 1/2 inch tubing.

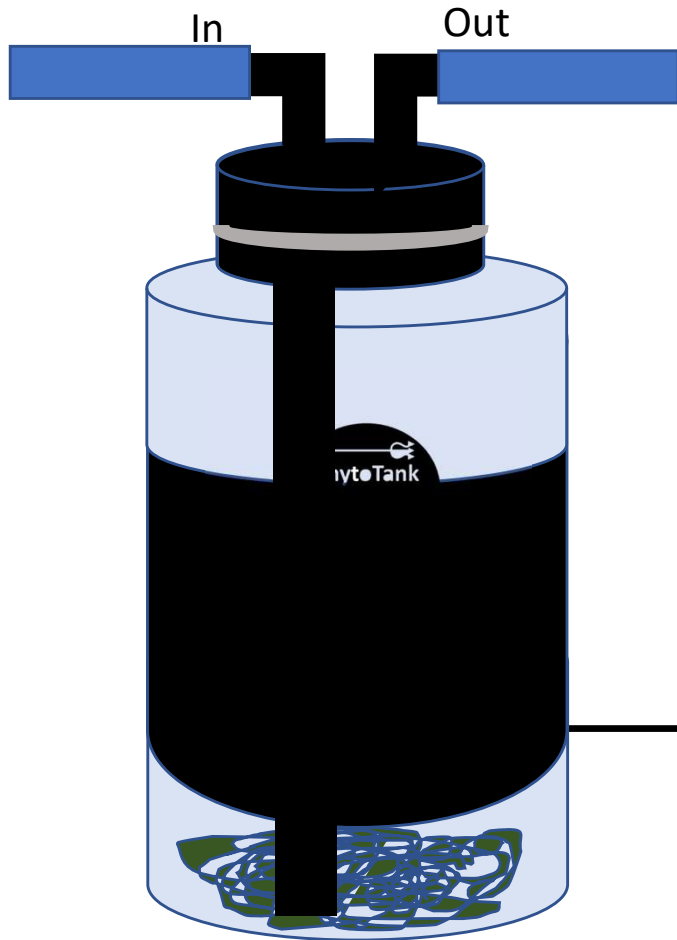
Connect tubing to barbed connectors on the PhytoTank cap using the supplied hose clamps



**Figure 4**

**Make sure the electrical connections are not in contact with water!**

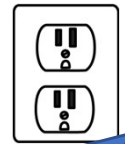
## PhytoTank Macroalgae Reactor Set-Up



**When the PhytoTank is filled with macroalgae the lights will appear a lot dimmer---always inspect the lights when your PhytoTank is empty, and the cap is removed!!!**

Connect the power supply  
to the PhytoTank

Recommend an outlet  
timer set to a 16 hour  
light and 8 hour dark  
cycle



**Figure 5**



## IMPORTANT INFORMATION

1. Make sure the electrical connections are not in contact with water.
2. Check the plumbing connections periodically for leaks
3. If your aquarium is less than 30 gallons, then invert the light cycle so that the PhytoTank is on when your main lighting system is off. This is because the LED lights in the PhytoTank may increase the water temperature.
4. When the chaeto takes up the full volume of the PhytoTank, turn the pump off, remove the cap and discard 75% of the chaeto. Take this opportunity to clean the inside of the tank with a damp cloth to remove any algae that may have started growing on the glass. Do not submerge the PhytoTank while cleaning it!
5. If the reactor is positioned below the water level of the sump, make sure you lift the reactor above the sump before turning off the pump and removing the lid to avoid siphoning water out of the sump. Alternatively, place shut off valves in the supply and discharge tubes as close to the reactor as possible so that you can close those valves after shutting off the pump and before removing the cap.