Live Algae Culture Equipment

www.industrialplankton.com
Global Reach

Over **200** algae bioreactors are used by our clients across **23 countries**.
Reliably producing enough biosecure live algae is a bottleneck for many hatcheries. The algae must be good quality - highly nutritious with low pathogen levels.

Traditional algae production is unreliable, labor intensive, and uses significant floorspace.

**Algae Production Made Easy**
Our algae equipment creates a stable biosecure culture environment, making it easy to **consistently** and **continuously** produce enough live feed to meet hatchery needs.

Routine tasks like cleaning, harvesting, and media addition are automated which makes life easier for hatchery staff, while **increasing reliability** and reducing operating expenses.

**Compact Algae Culture**
Compared to traditional methods, Industrial Plankton’s PBRs **only require a fraction of the labor, water, and floorspace.**
Five easy steps for reliable, biosecure live algae:

**Order & Install**
Your turnkey algae equipment ships directly from our facility. Uncrate and set up in less than a day.

**Inoculate (1 hour)**
Inoculate with a small volume of clean algae using biosecure disconnects.

**Scale up (4-14 days)**
Media is added automatically, while temperature and pH are continuously controlled to optimize conditions for growth.

**Harvest (2-4 months)**
The PBRs reliably maintain a clean culture at high density for months at a time while harvesting continuously.

**Clean (1 day)**
Run the clean-in-place (CIP) system to sanitize the reactor before each inoculation without scrubbing any tanks.
Our Photobioreactors

Continuous Production Densities (million cells/mL)

- **10-20** *Isochrysis* spp.
- **15-26** *Chaetoceros calcitrans*
- **10-25** *Chaetoceros muelleri*
- **60-150** *Nannochloropsis* spp.
- **11-26** *Thalassiosira pseudonana*
- **0.9-3.5** *Thalassiosira weissflogii*
- **1.2-4.0** *Tetraselmis* spp.
- **1.5-3.0** *Rhodomonas salina*

More algae that thrive

*Phaeodactylum* • *Karenia brevis* • *Skeletonema* spp. • *Chaetoceros gracilis* • *C. neogracilis* • *Haematococcus pluvialis* • *Spirulina* spp. • *Chlamydomonas* spp. • *Chlorella* spp. • *Pavlova* spp.

**Features**

- Biosecure Algae Cultures
- LEDs Designed for Algae
- Real-time Graphing and Data Logging
- Integrated Cooling and Heating
- Closed-Loop pH Control
- Self Cleaning CIP System
- Automated Scale-Up and Harvest
- Remote Access

**Daily Harvest:**
- **PBR 1250L**: 100-500 L/day
- **PBR 2500L**: 200-1000 L/day
- **PBR 100L**: 10-50 L/day

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Clients
Some of our clients prefer not to be named, but here are a few who aren’t camera shy.

NOAA Fisheries Milford Lab

Vitapro-Nicovita

Huîtres Mallet Oysters

Cornell Cooperative Extension of Suffolk Country Marine Program
Client stories can be found at www.industrialplankton.com
Global Innovation From Canada

Bioreactors for clean, on-site, live algae production

Founded in 2010, Industrial Plankton Inc. designs and manufactures **turnkey bioreactors** in Canada for clean, on-site, live plankton production for **aquaculture**, **research** lab, and **biotechnology** uses.

Our algae bioreactors optimize for ease of use and **biosecurity**. Their automation increases culture **reliability** and saves operators countless hours. The result is **compact** equipment that **reliably** produces **biosecure**, **high-density algae**.