



Industrial PLANKTON™

Seaweed Bioreactors

Turnkey gametophyte and sporophyte bioreactors

TURNKEY GAMETOPHYTE & SPOROPHYTE BIOREACTORS



Accelerating Research & Development

- Control culture parameters
- Historical Data
- Selective breeding
- Produce biomass for direct seeding

Reliably Bulk Seed

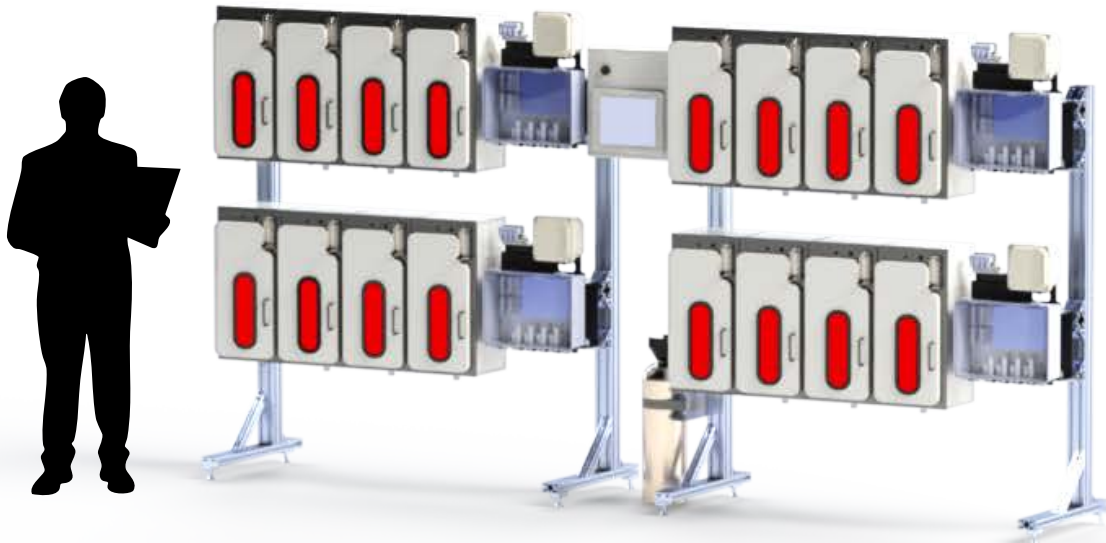
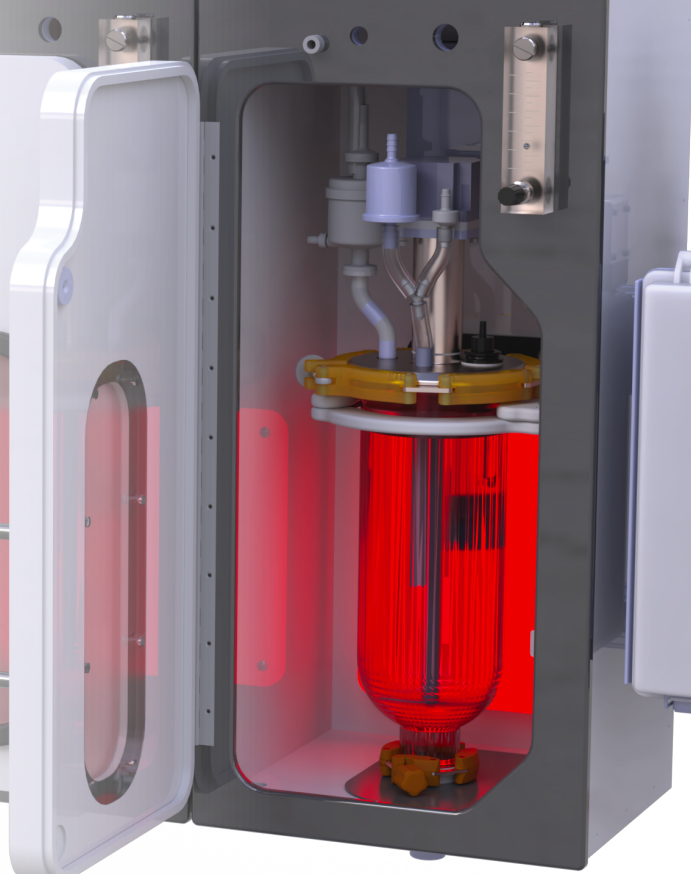
- Predictable results to prevent delayed farm deployment
- Improve downstream yield with continuous supply of seed with desirable traits
- Reduce the requirement for collecting wild seed
- High-quality seaweed seed available when you need it



Macrocystis tenuifolia gametophytes after bulking for several weeks inside bioreactor.

MODULAR DESIGN

-  Independently temperature-controlled enclosures
-  Closed-loop pH control with automated CO₂ dosing
-  Motorized blade for biosecure fragmentation
-  0.2 µm filtration for biosecure media and air exchange
-  Autoclavable tank, lid, filters, and tubing
-  Spectrum and intensity controlled LEDs
-  Real-time data logging and graphing
-  Web-based remote access





Research at the Woods Hole Oceanographic Institution is focused on testing high performing strains of kelp, and depends on an ability to grow vigorous gametophytes. Industrial Plankton has developed photobioreactor systems uniquely suited to research and commercial scale culture of this critical phase of the kelp nursery process.



We believe that the success of future kelp nurseries will depend on growing gametophytes more efficiently, productively, and consistently, and Industrial Plankton photobioreactors are leading the way.

Industrial Plankton's Gametophyte Bioreactor System has been a game changer. They have optimized a system that promotes rapid growth of large clean cultures. We now spend less time on daily culture maintenance and more time on optimizing the outplanting process.

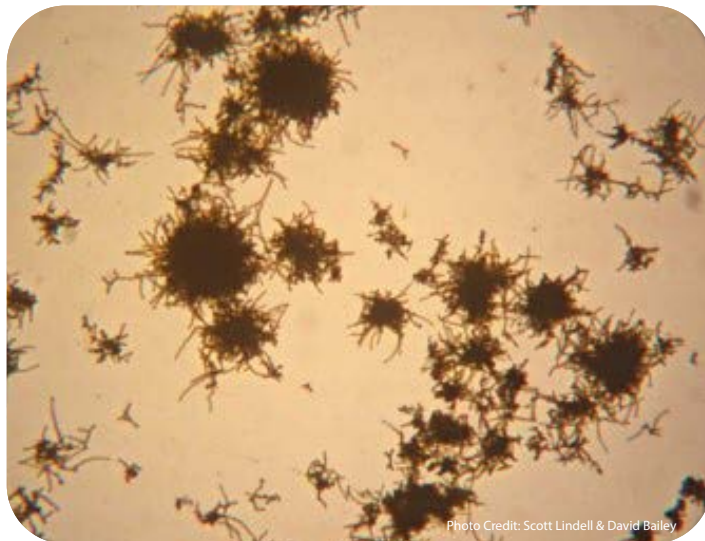


Photo Credit: Scott Lindell & David Bailey

Healthy sugar kelp gametophyte culture in the gametophyte bioreactor at Woods Hole Oceanographic Institute (4 x magnification)



Photo Credit: Scott Lindell & David Bailey

95 grams of gametophyte biomass from Bioreactor

**Scott Lindell &
David Bailey**
Woods Hole
Oceanographic
Institution



Global Innovation from Canada



IndustrialTM Plankton

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

Contact Us

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