Solar Algal/Bacterial Stimulants for Highest Intensive Organic Food Production





Barry Antonio Costa-Pierce, Ph.D., Fellow AAAS



Algal/Bacterial/Microbial Aquaculture

Highest Production Intensive Organic Agriculture





China



Vietnam, SE Asia

Warm Water, Nutrients, Algae, Microbes

Feeds, Fertilizers



Fish are selected not for food but for their ability to (1) eat algal/microbial/bacterial flocs and keep them in a high growth state and (2) keep flocs suspended/floating to the surface to be harvested.

Fish are fed carbon-rich particulate farm wastes only. Fish must have an outstanding tolerance to low oxygen. Fish are sacrificed humanely and made into fish fertilizer mixes.

Goldfish (*Carassius auratus*) are a perfect fit for this situation













Applicable Worldwide



From: The International Center for Living Aquatic Resources Management (ICLARM)

Malawi, East Africa



References

Costa-Pierce, B.A. 2022. The anthropology of aquaculture. *Frontiers in Sustainable Food Systems* doi:10.3389/fsufs.2022.843743

Costa-Pierce, B.A. 2021. Radical Aquaculture: Transformational social-ecological systems that advance Sustainable Development Goals (SDGs). *World Aquaculture* 52 (4): 18-32.

Fonseca, T., B.A. Costa-Pierce, and W.C. Valenti. 2017. Indigenous fish aquaculture towards sustainable development of rural communities in Brazil. *Reviews in Fisheries Science & Aquaculture* 25 (4): 316-330.

Brummett, R.E. and B.A. Costa-Pierce. 2002. Village-based aquaculture ecosystems as a model for sustainable aquaculture development in Sub-saharan aquaculture, p. 145-160. In: B.A. Costa-Pierce (Ed.) *Ecological Aquaculture: The Evolution of the Blue Revolution.* Blackwell Science, Oxford, UK.