

# List of the applications, trials and experiments completed with Ultra-OXYGEN solutions.

## 2003-2008

Environmental management research project at a fish farm financially supported by a Research and Development Program for New Bioindustry Initiatives of Bio-oriented Technology Research Advancement Institution (BRAIN) of Japan. In this project, a prototype of Ultra-OXYGEN was used for efficiently aerating the water in net pens for rearing fish to prevent the occurrence of hypoxic water during the night.

### Study material.

Net pen culture of red sea-bream, *Pagrus major*  
Aeration of the water

### Reference to publication.

Available on request

### Results

Elevation of DO of the water inside the net pens.  
Significant promotion of growth

## Since 2011

Ultra-OXYGEN solutions sold.

Devices purchased by agricultural farms to treat the irrigation water, fisherman's associations, and fishery companies for aerating the water in Japan, Vietnam, Indonesia and Philippine, corporations and universities (UAE University, Singapore Industrial University, Massachusetts University) for treatment of water with ozone micro-bubbles.

### Where are they working currently?

Personal purchase, Nanjing, China  
KIDZ GENIUS, Jakarta, Indonesia  
KIOST, Busan, Korea  
GrandCatch Inc., San Juan City, Philippines  
Gradiant International Holdings Pte. Ltd., Singapore  
National University of Singapore, Singapore  
Kasei Co., Ltd., Nonthaburi, Thailand  
College of Engineering, UAE University, Al Ain, UAE  
Hiep Hoa Loi Ltd., Can Tho city, Vietnam.  
University of Massachusetts, Amherst, MA, USA  
ClassEco, South Africa

## Japan

Detail information of the customers confidential but we can confirm the following:

Farmers:

Tomato, mini-tomato (Tokushima, Kagawa, Kumamoto, Miyazaki),  
leaf vegetables (Shizuoka, Kumamoto)

Fish and shrimp culture farms  
(Kumamoto, Shimabara Nagasaki Pref.)  
Cyclamen (Ishinomaki, Sendai Pref), Rose (Shimabara, Nagasaki Pref.), orchid (Kumamoto)

### 2015 to 2018

Research project for artificial culture of clam spats by PUK, Bio-culture in Kami-Amakusa City, Kumamoto Prefecture)

The sea water used for rearing clam larvae is sterilized by ozone micro-bubbles released from Ultra-AIR/YIELD.

#### Study material

Artificial culture of short-neck clam, *Ruditapes philippinarum*

Sterilization of the water by ozone micro-bubbles used for the culture of larvae.

#### Results?

Success of establishment of mass culture of the clam

### 2018 to present.

Research project for artificial culture of clam spats by PUK (Prefectural University of Kumamoto and a local fisherman's Association in Kumamoto City, Oshima Gyokyou)

The sea water used for rearing clam larvae is sterilized by ozone micro-bubbles released from Ultra-OXYGEN.

#### Study material?

Artificial culture of short-neck clam, *Ruditapes philippinarum*

Sterilization of the water by ozone micro-bubbles used for the culture of larvae.

#### Results?

Success of artificial culture of clam larvae

### 2019 to present.

**Research project** for DO management of the water at a shrimp farm with Ultra-OXYGEN by PUK (Prefectural University of Kumamoto and a local shrimp farmer, Kofukudo)

#### Study material?

Japanese tiger shrimp culture

Efficient aeration of the water of the culture pond to prevent the occurrence of hypoxic conditions of the water during the night-time.

**Experimental work for feasibility study:** Introduction of Ultra-OXYGEN for the efficiency improvement of shrimp farming in Thailand  
JICA (Japan International Cooperation Agency)

### Study material?

Vannamei shrimp culture

Efficient aeration of the water of the culture pond to prevent the occurrence of hypoxic conditions of the water during the night-time.

### Results?

Promotion of growth

Efficient production of shrimp

Marked decrease of Food Conversion Rate

**Other projects in South Africa available on request.**