



Prevent Red Tide in Vietnam

by Farming *Gibasa*



2705: Akita Prefectural Akita Minami Senior High School

Shota Fujimura, Kairi Sato, Sota Natsui, Shiina Sasaki

1. Problem



1. Industrial and domestic wastewater
2. Eutrophication
3. Much Planktons
4. Red tide occurring
5. Decrease of Oxygen
6. Death of fish



Date	Place	Fishery damage
2016/11/24,25	Khanh Hoa	About 10t
2016/9/16	Thanh Hoa	About 47t

Fishery damage caused by Red tide

2. Hypothesis

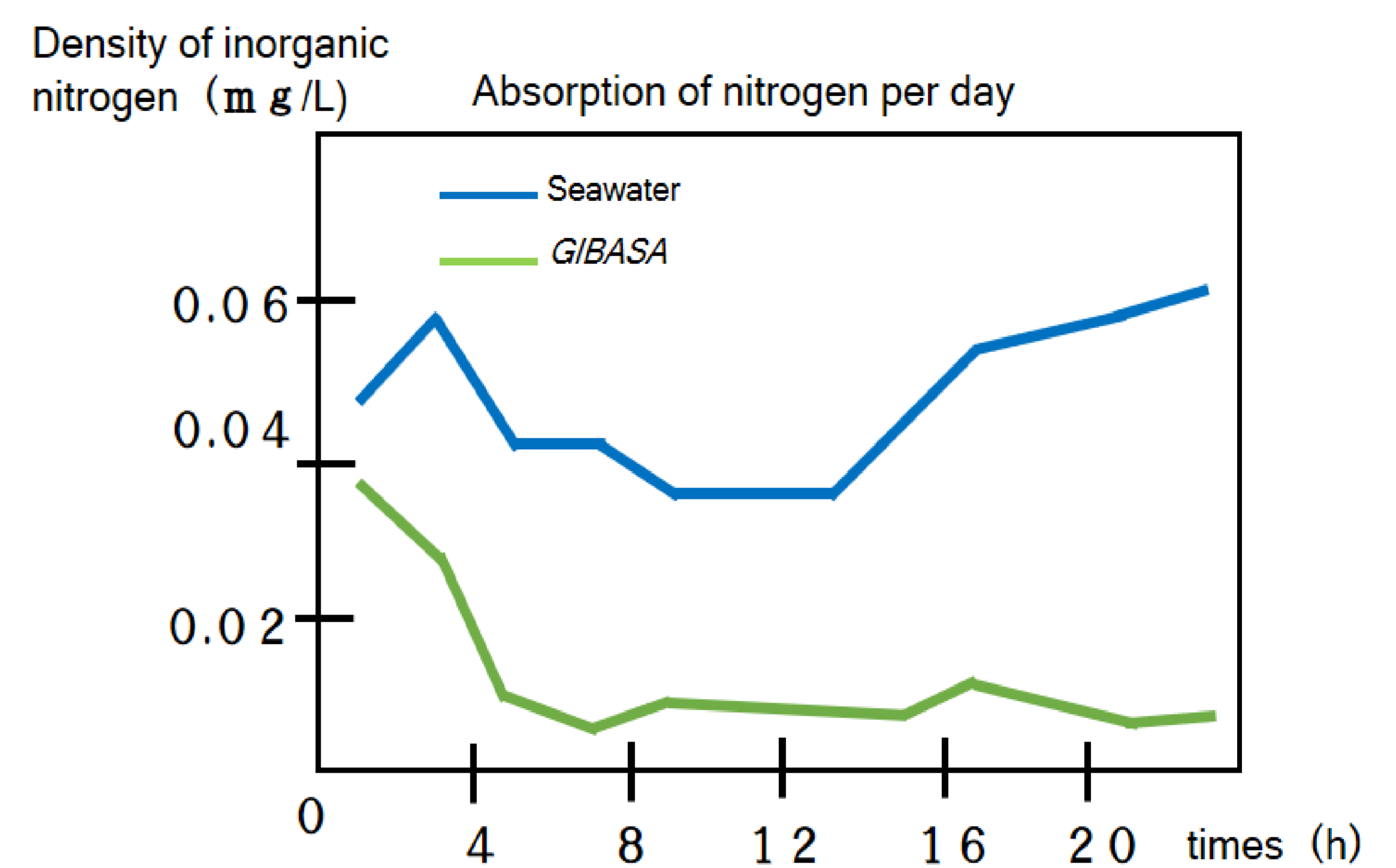
Farming *Gibasa* can prevent **red tide**



3. Method and result

Ability of seaweeds

Seaweeds can absorb **nutrient salts and control eutrophication**



(出典「大型海藻アカモクを利用した水環境の修復活動」佐々木久雄)

Field Work : Akita Prefectural Fisheries Promotion Center

Gibasa is a kind of seaweeds. Eating *Gibasa* is popular in Akita.



Why we choose *Gibasa*?

1. Friendly for the ecosystem

Gibasa is native to Vietnam

➔ No negative influence!

2. Environment in Vietnam

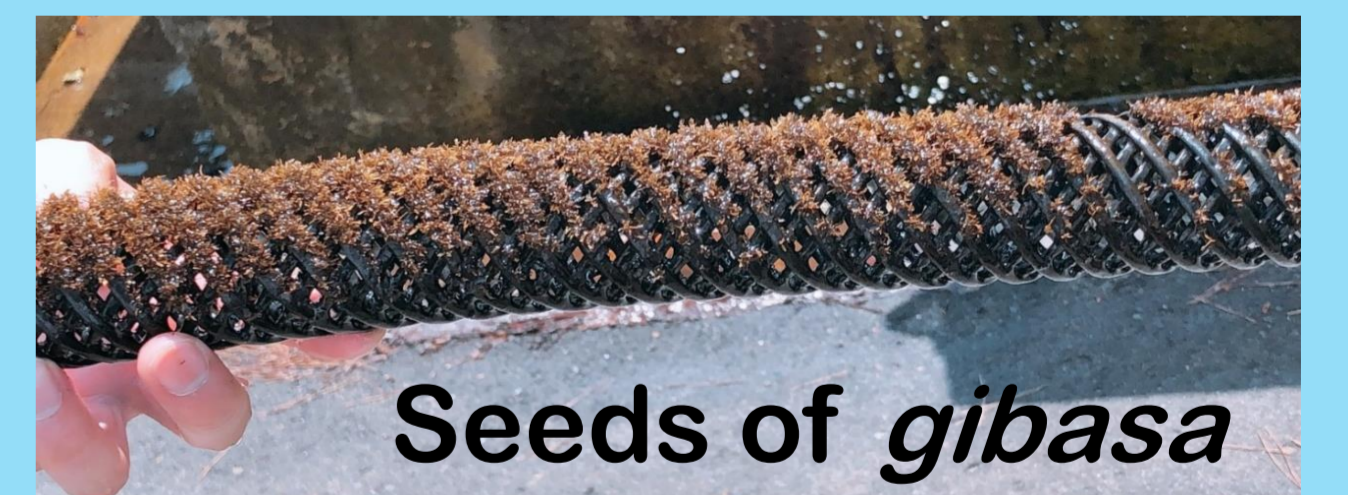
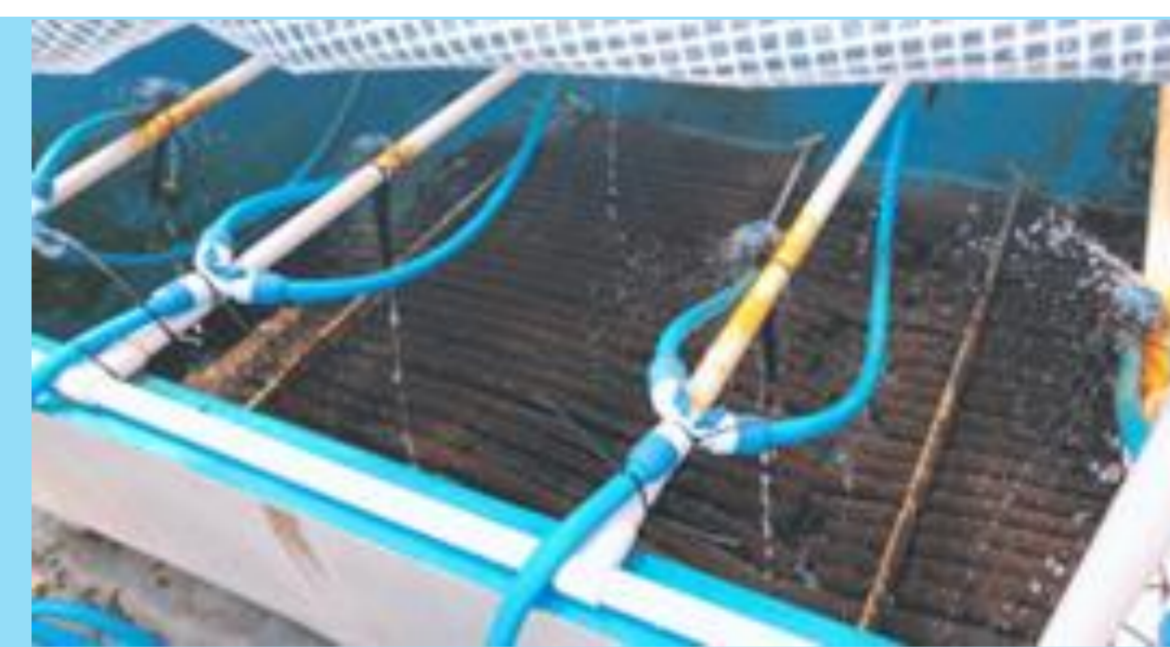
	Suitable environment for farming <i>Gibasa</i>	Environment in Vietnam
Strength of wave	Calm	Calm
Temperature	3~31°C	10~30°C

➔ Environment in Vietnam is suitable

3. Easy and cost-effective

Farming *Gibasa* need only 4 equipment

Seeds of *Gibasa*, Pipes, Sprinklers, Rope



➔ Farming *Gibasa* is Sustainable

4. Improvement

1. Introduce farming *Gibasa* into Vietnamese

- How much money will be cost?
- Who farm *Gibasa*?
- How to teach Vietnamese farming *Gibasa*?

2. How to consume farmed *Gibasa*



1. Eating



2. Animal feed



3. Manure

5. Conclusion

1. Farm *Gibasa* in Vietnam
2. Suppress the eutrophication
3. Prevent to occur **red tide**

Can reduce fishery damages!

