

IITA-TAIYO Joint Project

Compound Type Production Project

◆ Hydroponic soil cultivation of vegetables



Utilization of
excessive
nourishments

◆ Catfish farming



Supply of food to
the fry
(It helps to avoid
cannibalism)

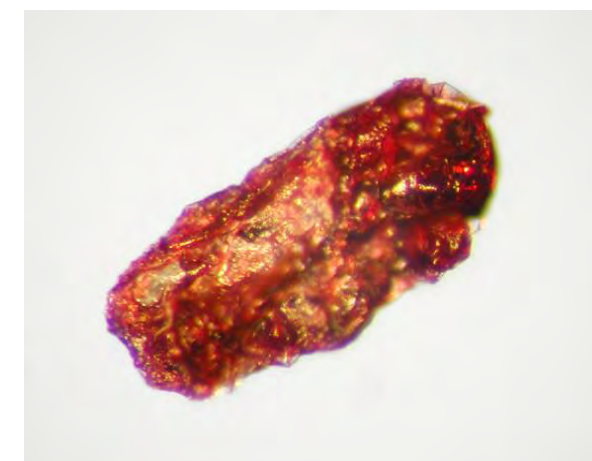
◆ Mass-rearing system of the Sleeping Chironomid as a living food for fry



Rehydration



Dehydration



Dried larva of Sleeping
Chironomid

Never die for years and
revive

TAIYO

We value Africa's ownership. We set a stage for Africa's self-growth.

IITA

Research to Nourish Africa

The International Institute of Tropical Agriculture (IITA) is one of the world's leading research partners in finding solutions for hunger, malnutrition, and poverty. Supported by the CGIAR, World Bank, Science Council, and donor countries including JAPAN



Mass-rearing system of the Sleeping Chironomid as a living food for fry

◆ Avoid catfish cannibalism

The cannibalism occurs due to inappropriate food for the fry. Artemia is costly for local farmers. Not enough zoo planktons are cultured in right time.

◆ Local genetic resource

They live in semi-arid regions in Africa.

Countries have been an identified habitat: Nigeria, Burkina Faso, Malawi and Mozambique

◆ Long preservation in natural state

It can be stored in a dry form at room temperature many years.

There is a record found the complete desiccated larva has lived for 17 years and revived.

◆ The Sleeping chironomid farming business

Mass-produced dry larvae of the Sleeping chironomid not only contribute to their nations' farming improvement but also are prospective exported to the world as live baits for aquarium fish. By acquisition of foreign currencies, maintenance and scale of rearing facilities are likely to expand.

“The Sleeping Chironomid” is the higher and biggest cryptobiotic organism

*Cryptobiosis (an ametabolic state of life):
Even under dehydration, an organism in a cryptobiotic state can essentially live indefinitely until environmental conditions return to being hospitable.



Farmers' Cooperative and Agricultural Machinery Training Centre

◆ Establish Farmers' Cooperative

Making agricultural management easier by uniting small scale farmers.

◆ Training and consulting

Training how to operate, maintain and utilize agricultural machines.

Giving the farmers opportunities of improving their business continuously.

◆ Machine rental

Renting agricultural machines to the farmers at a moderately affordable rate.

◆ Utilizing Drone

Introducing high tech monitoring system by utilizing drone. The data which collected by drone has research and commercial value.

◆ Zero initial cost (pay as you earn)

The farmers may not have access to big market. Taiyo acts as wholesaler who buys crop from farmers and sells in a major market.

The fees of all above cost are deducted from sales.

That means the farmers do not need to pay any initial cost.

Agricultural Machinery Training Centre

- We are sourcing for about 10 years old machines from Japan which do not majorly rely on ICT so it can be used in any rural area.
- The machine should be one that we could manage and maintain or repair independently from manufacturer.
- Buying used machine is cheaper than actual new machine. So we can buy more number of machines and rent it out at a moderately affordable rate to local farmers.

