GIFT "Genetically Improved Farmed Tilapia": All Male Tilapia Fingerlings with Greater Yield and Uniformity

Greater yield and uniformity in tilapia farming

The technology involves predominantly growing male tilapia. This can be achieved through various methods such as manual selection, hormone treatment, or natural techniques. Specifically bred tilapia (GIFT) is recommended for commercial farming.

This technology is TAAT1 validated.

8·8 Scaling readiness: idea maturity 8/9; level of use 8/9

Gender assessment 4

Climate impact 7

Problem

- Mixed-sex tilapia culturing often leads to lower yields and non-uniform harvests.
- Manual sex selection at the beginning of the production cycle is time-consuming.
- Hormonal alteration of fry involves the application of α-Methyltestosterone, which may pose concerns regarding its use in feed and its impact on fish health and the environment.

Solution

- Utilizing improved lines of tilapia breeds can enhance the effectiveness of manual selection, hormonal treatment, YY male technology, and GIFT.
- Crossbreeding strategies can produce 100% male offspring, improving mono-sex tilapia production efficiency.
- Careful management of brood stock selection in hatcheries, focusing on younger brooders free from wounds and parasites, ensures high-quality and abundant fish seed production.

Key points to design your project

The mono-sex male tilapia technology aligns with Sustainable Development Goals, promoting food security, gender equality, climate action, and marine life preservation. To integrate this technology, consider:

- Feasibility studies,
- Legal frameworks, and specialized training for farmers. Training costs and
- Communication support should be included.
- Accompanying solutions include Hapa Nets for Mass Fingerling Hatchery Production.

Cost: $$$ **100 USD**
Stocking rate of 1,000 fish per cubic meter of water

ROI: $$$ **30 %**
Harvest volume increased

0.1 USD
Cost of one month mono-sex fingerlings in Kenya

300 - 900 g
Weight of male fingerlings stocked in cages in 5 to 8 months of culture

IP
Patent granted

WorldFish
Bernadette Fregene

Technology from

ProPAS

Commodities

Fish

Sustainable Development Goals

2 ZERO HUNGER
8 DECENT WORK AND ECONOMIC GROWTH

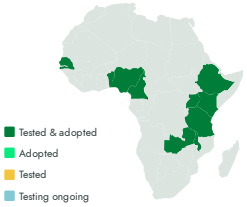
Categories

Production, Improved varieties, Yield improvement

Best used with

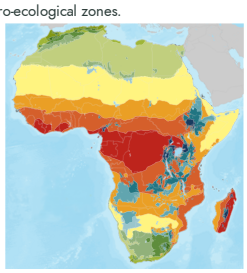
- Hapa Nets for Fingerling ›

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Breeders