

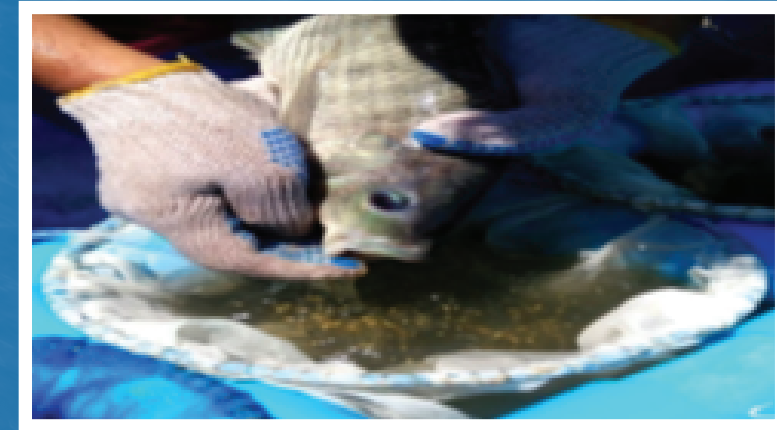
TILAPIA BREEDING

Nile Tilapia (*Oreochromis niloticus*) breeding

- Nile tilapia must be at least 6 months old to be suitable for breeding
- The mature broodstock should not be larger than 100g in size for egg collection at the start, as smaller fish produce more eggs per kg and are easier to handle than large fish
- Nile tilapia can be spawned continually for 2 years if they are fed a limited diet

Morphology of tilapia broodstock sex organs

- Female sex organ with 3 openings; One opening for excreta, One opening for egg release, One opening for urine release
- Male sex organ with 2 openings; One opening for excreta, One opening for urine & milt release



- Fry that remain in the pond/hapa that were missed during egg harvest should be removed.
- Fry with no yolk sac should be discarded as they will compromise sex reversal because of their unknown age

Tilapia egg incubation

Key considerations for egg incubation

- Ensure all hatchery equipment are well cleaned and disinfected
- Remove white egg shells by siphoning and adjust water flow as appropriate.
- 2-3 days after hatching, transfer the fry into sex-reversal treatment hapas/tanks.



Tilapia Pairing

- Only one species of tilapia should be bred in one pond to avoid cross breeding.
- Brood stock should be stocked at 3 fish/m² and stocked at a sex ratio of 1: 2 or 1: 3 (males to females)

Feeding

Brood stock should be fed twice a day at 8:00 - 9:00 am and 3:00 - 4:00 pm, at a daily feeding rate of 5-3% body weight.

Tilapia Egg collection

- Female fish are mouth brooders.
- Collected eggs from the mouth of the female tilapia fish every 2 weeks



- Feed fry with 30-40% crude protein (CP) powdered feed at a rate of 10-5% body weight 3-4 times a day, for 21-28 days.