

## PRACTICE ABSTRACT n° 23

**Author:** Aruho Cassius –National Agricultural Research Organization  
Ddungu Richard –Fisheries Resources Research Institute, NaFIRRI

### Fingerling production of Victoria carp (*Labeo victorinus*) “Ningu”

*Labeo victorinus*, commonly *Ningu* is a potamodromous common cyprinid of the Lake Victoria and its deltas which has become critically endangered. It is a delicacy among many fish consumers in Uganda and equally used as bait for the Nile perch fishery due to its resilience on hooks. Rearing of this endangered fish species has the potential to alleviate fishing pressure from water bodies and provide food and job opportunities to riparian communities. To promote captive culture of the species, spawning and nursing technologies for its seed production need to be developed and adopted.

To produce seed,

1. Mature healthy broodstock is obtained from the wild or from a certified fish farm.
2. Adult females produce eggs of uniform size and green color while males produce creamy milt on gentle press of the abdomen.
3. Broodstock should be rested for at least 6 hours in well-aerated ponds or tanks during pre-stimulation conditioning before stimulation to limit stress.
4. Stimulation for ovulation is done by injecting the fish dorsal ventrally using Ovatide® or African catfish pituitary extract. After induction the males and females are kept separately.
5. The females are stripped of their ripe eggs after 10 to 16 hours of stimulation (Figure A). The males are also stripped of the milt, which is placed into a bowl containing physiological saline solution (Figure B).
6. The eggs are fertilized by adding the milt solution into the bowl containing the eggs and mixing by shaking.
7. The eggs are incubated on net trays installed in plastic tanks, preferably supplied by an underground water well. (Figure C). The water temperature is maintained at 26 to 28oc.
8. After 24 to 36 hours, larvae start to hatch. The shells and dead eggs left behind on the tray are removed immediately after most embryos have hatched to avoid ammonia build up in the system.
9. Three to five days after hatching, the larvae start feeding. Larvae are fed to satiation using decapsulated (shellfree) *Artemia* cysts for five to ten days. (Figure D).
10. Stocking is maintained between 10-20% by volume.
11. Larvae are then weaned to dry feeds of at least 40% crude protein by sequential replacement for five to ten days.

