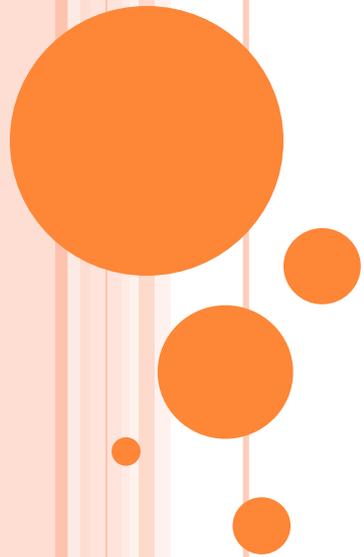


# SEED PRODUCTION PROCEDURES OF RED TILAPIA

**Dr. P. Chidambaram**  
Associate Professor & Head

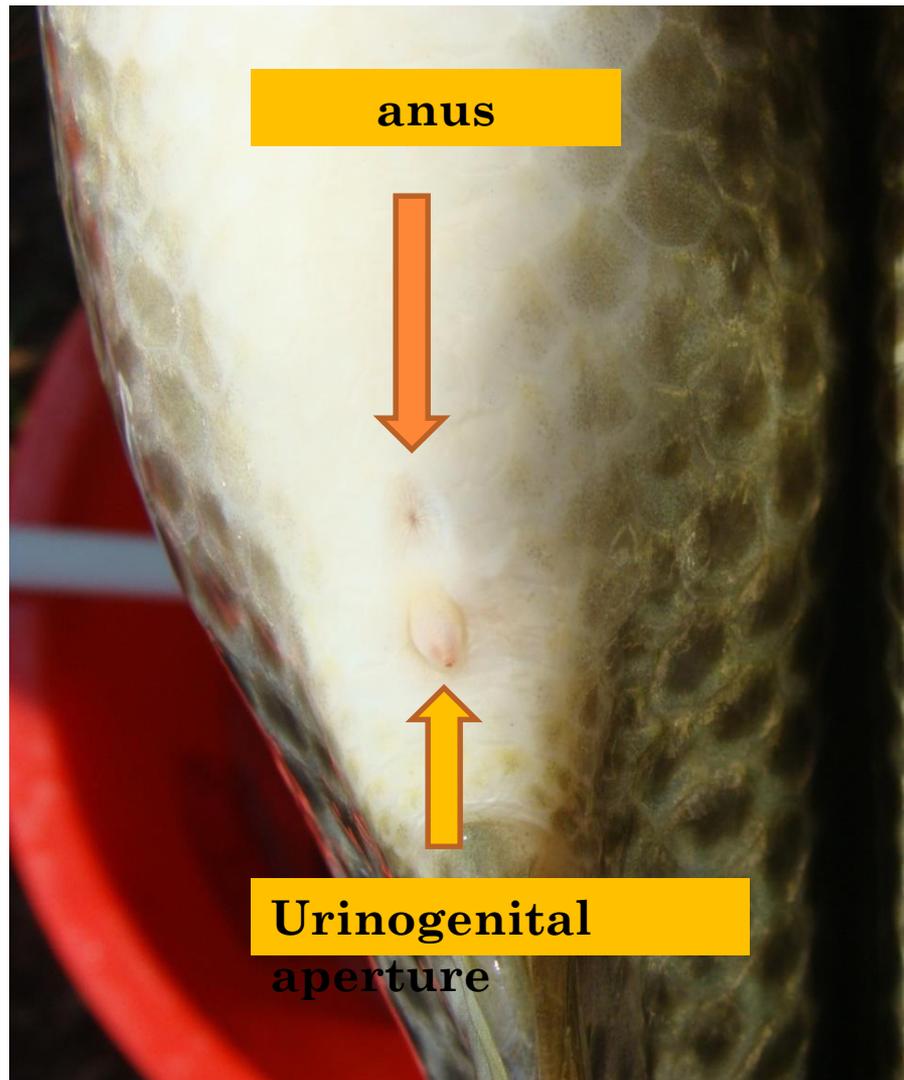


# Hatchery Operations

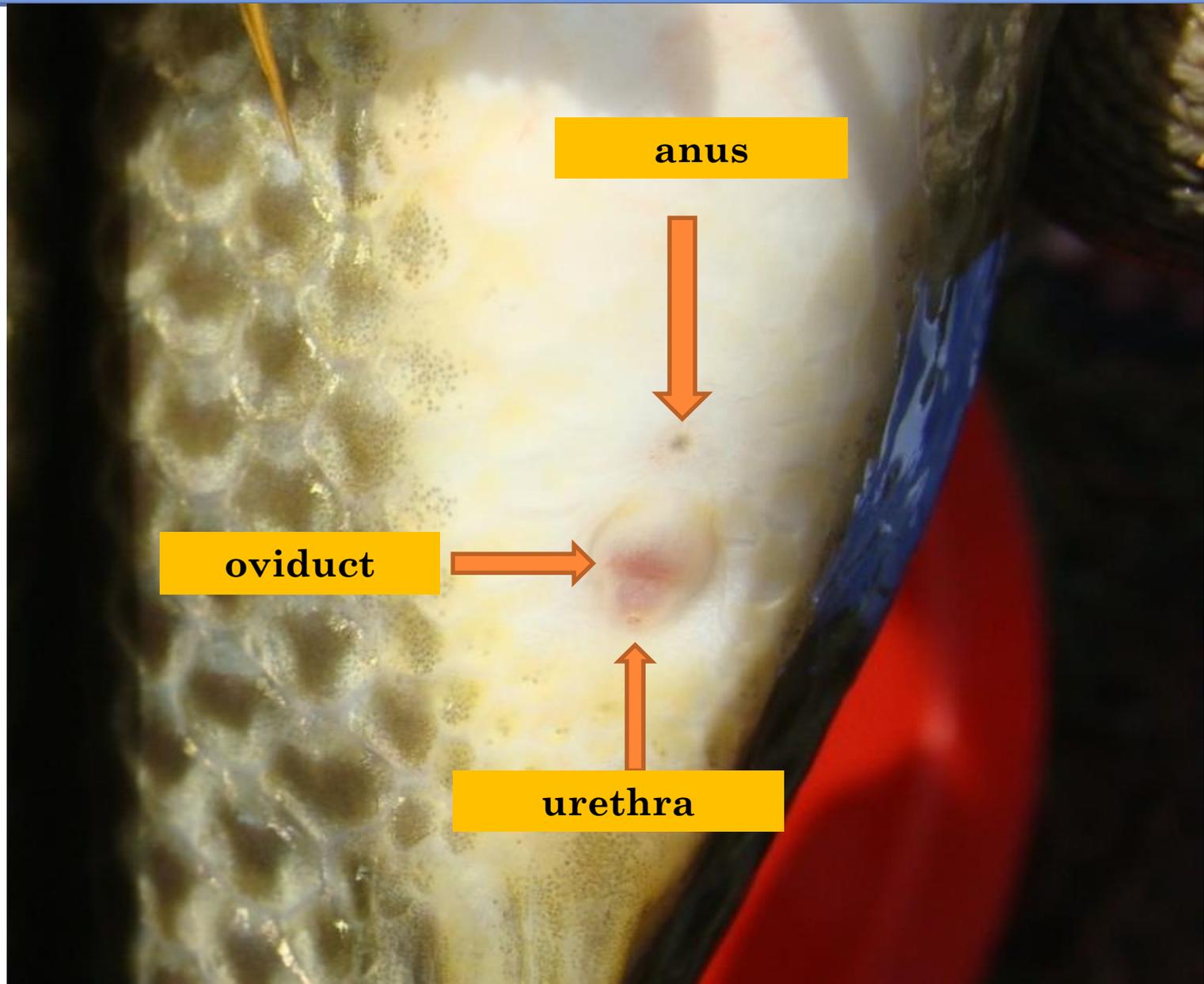
# Active and healthy broodstock



# MALE GENITAL PAPILLA

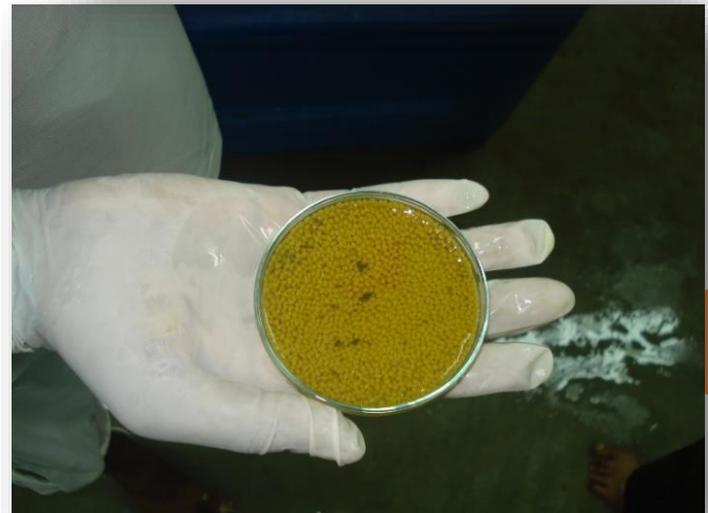
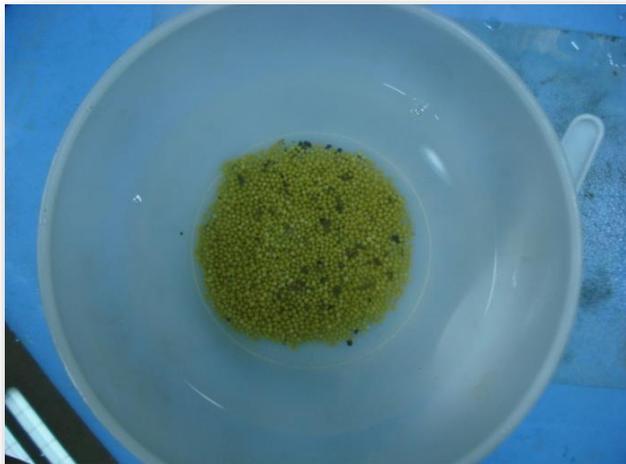


# FEMALE GENITAL PAPILLA



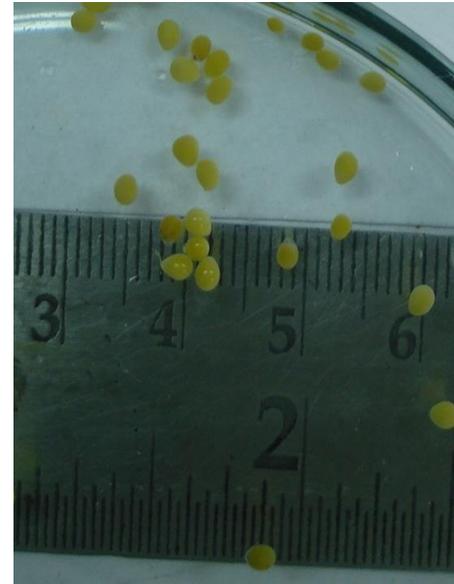


# EGG COLLECTION AND CLEANING



# EGG STRUCTURE

- ↔ **LENGTH**      **2.3MM**
- ↑ **HEIGHT**      **1-2MM**
- **DIAMETER**      **1.5-3MM**
  
- **OVAL IN SHAPE**





main pipe from overhead tank passing through UV filter

UV FILTER

PIPE LINE CONNECTED TO COLLECT WATER FROM JAR HOLDING TANK

DRAIN PIPE CARRYING WATER IN TO COLLECTING PIT



## EGGS IN SUSPENSION INSIDE THE HATCHING JAR



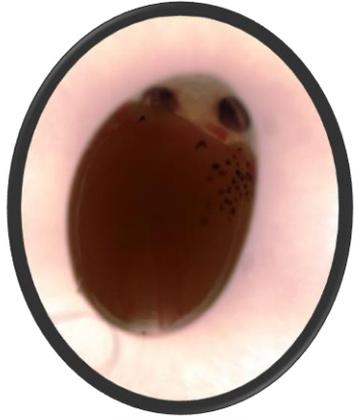
## SET UP OF THE HATCHING JARS IN THE BREEDING UNIT



# STAGES OF EGG



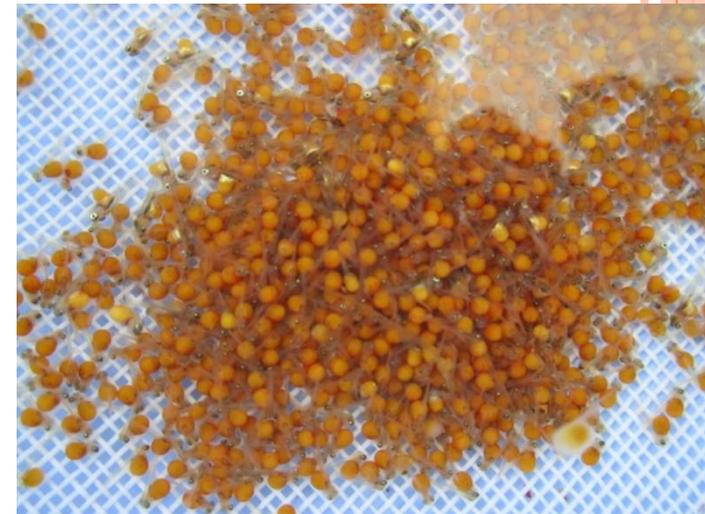
# EMBRYONIC DEVELOPMENT



Free swimming fry from the incubation jars move through the outlet of the jars and gets collected in the mesh hapas, placed outside of each incubation jars.









1. 18 நாள்கள்



2. 40 நாள்கள்



ஓரு பர்லு (ஆணு) இனு மீனு ஊறுபுத்து

முட்டைகளை சேகரித்தல்

முட்டைகளை பொரிக்க வைத்தல்

குஞ்சுகளுக்கு (மூன்று நாட்களுக்கு பிறகு) ஹார்மோன்  
கலந்த உணவினை அளித்தல்

21-28 நாட்கள் வரை

பிறகு 15-30 நாட்கள் வளர்ப்பு குளங்களில் வளர்த்தல்



# MATERIALS REQUIRED FOR HORMONE FEED PREPARATION



# HORMONE FEED PREPARATION



## Feeding rate for administration of hormone feed for sex reversal in Tilapia for 1 million fry

<b>Days</b>	<b>Average Body Weight (gms)</b>	<b>Feeding Rate (% body weight)</b>	<b>Feeding Frequency (Feedings/day)</b>	<b>Feed for 1 million fry (Kgs)</b>
1-7	0.01	30	6-8	20
8-14	0.07	20	6-8	100
15-21	0.18	10	6-8	130
Total feed				250

## Feeding the fry with hormone fortified feed

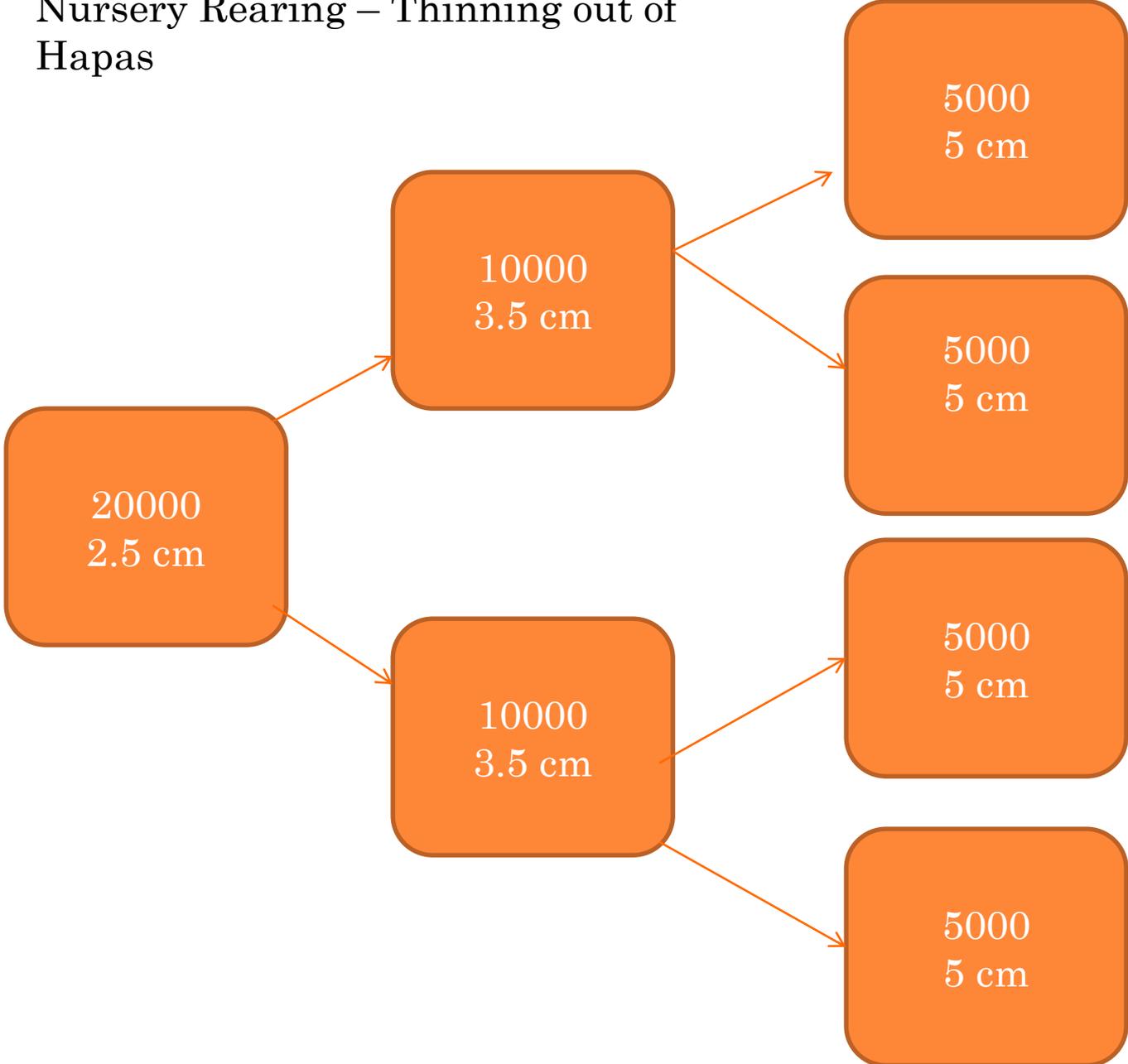


# Nursery Rearing

- After the completion of 21 days of hormone treatment ,Nursery rearing units are required for the rearing of tilapia fries to grow upto the saleable size of 2 cms length.
- Fry can be stocked in hapas (10m x 3m x 1m) in open ponds at a density of 1 lakh nos per Hapa.



# Nursery Rearing – Thinning out of Hapas



# FEEDING IN NURSERY HAPAS





# ROUTINE CHECKING OF WATER QUALITY PARAMETERS



# PACKING OF TILAPIA FINGERLINGS





