



PRAWN FARMING IN SRI LANKA

KING AQUA SERVICES (PVT) LTD



***Penaeus monodon* - Giant Tiger Prawn**





Site Selection For Prawn Farm Projects

01. *Topography*



2. Water Source & Drainage



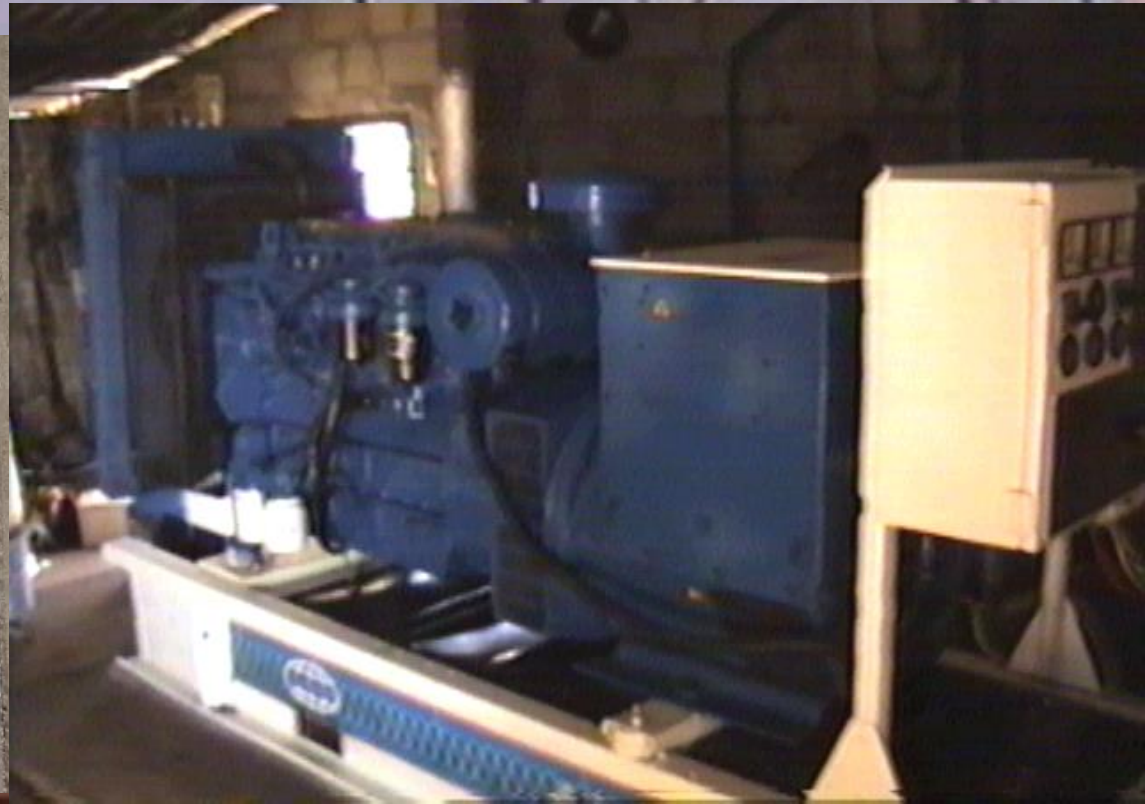
03. *Soil Quality*



04. *Accessibility*



05. *Power Source*



06. *Socio-Political Factors*



07 *Environmental Factors*



Prawn Farm Project

Design & Construction

Inlet Canals & Water Pumping System



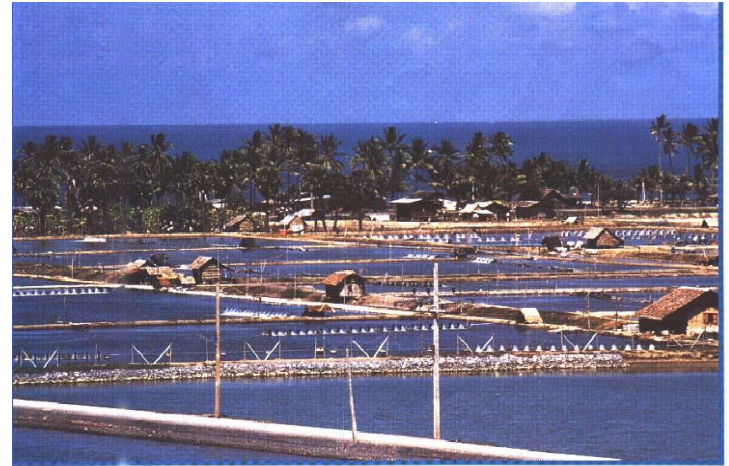
Reservoir



Supply Canals & Flumes



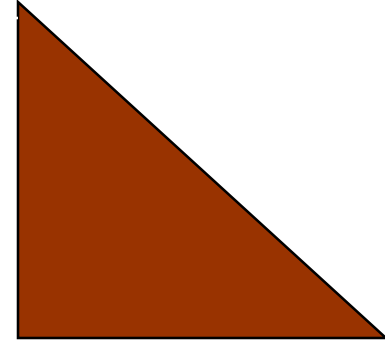
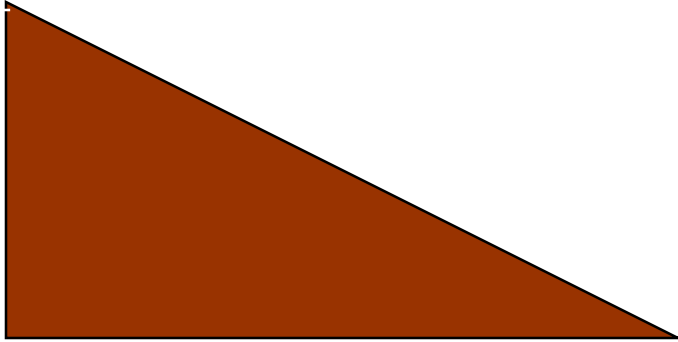
Pond Shape



Pond Size



Pond Dikes



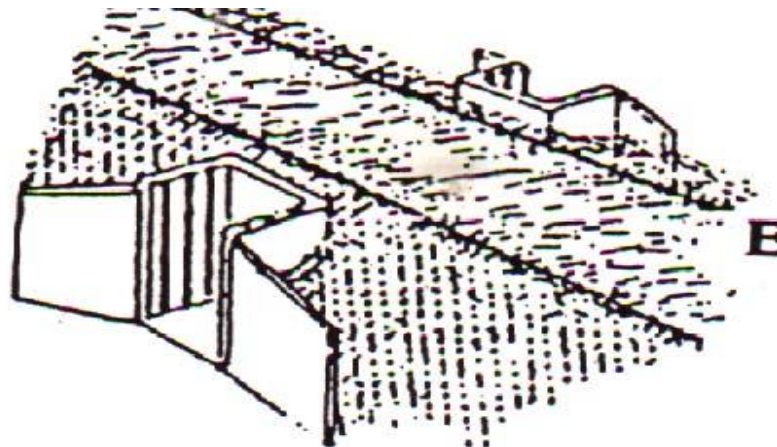
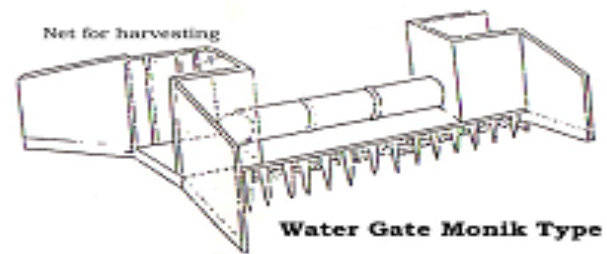
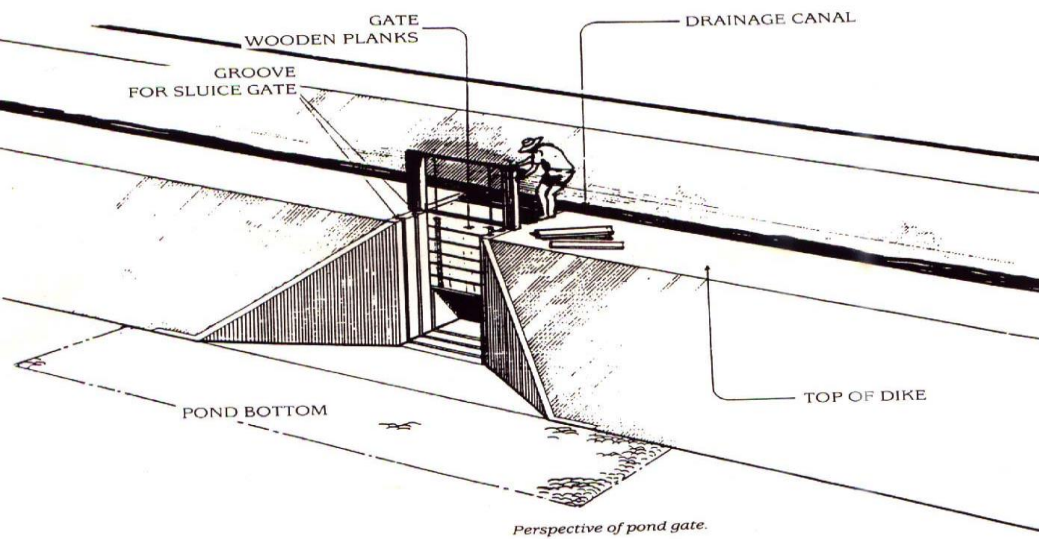
HDPE Liners

Inlets



Outlets





Sediment Pond



Buildings





Pond Preparation



















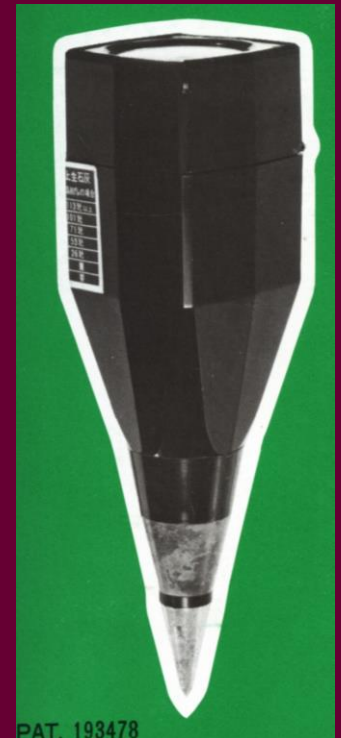
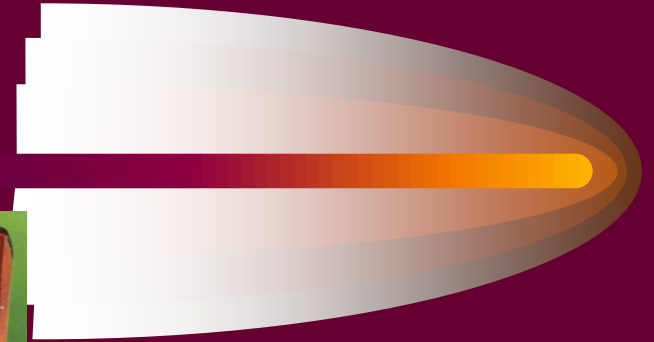
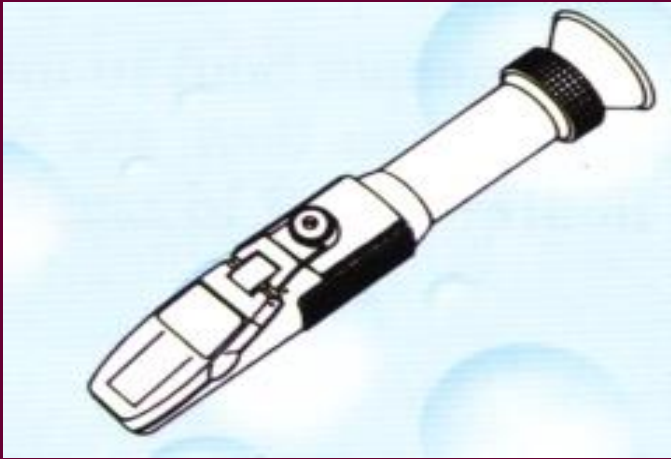






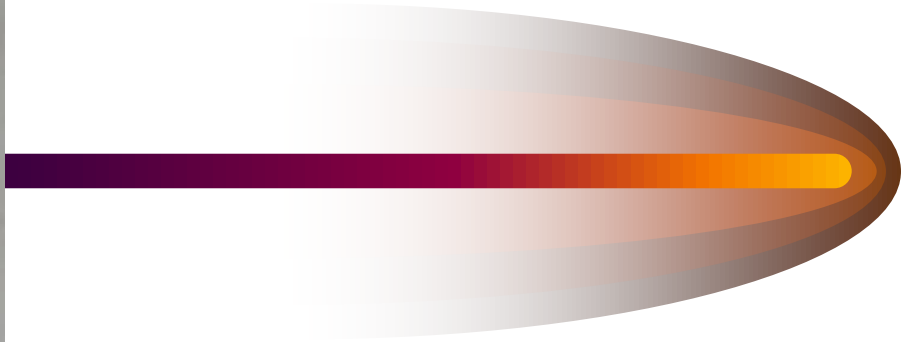












Post Larvae Selection & Stocking



A mature male broodstock
black tiger prawn from the
BIOTEC program.

Life Cycle Of *Penaeus Monodon*



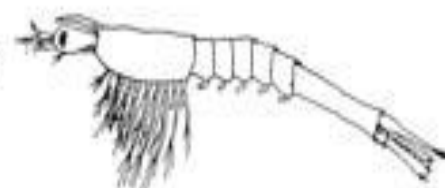
Egg



Nauplius



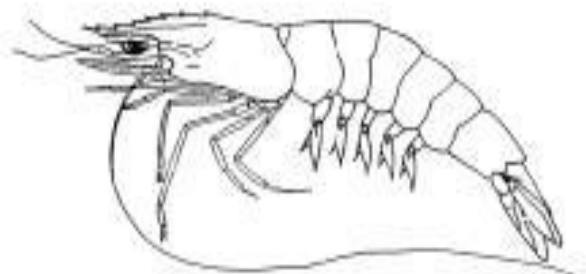
Protozoa



Mysis



Post Larvae



Adult

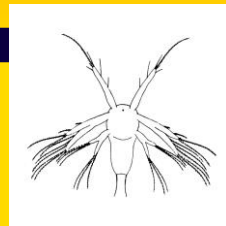


Life Cycle Of *Penaeus Monodon*

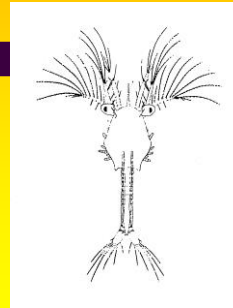


Egg

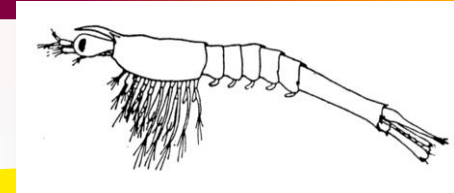
Kijl



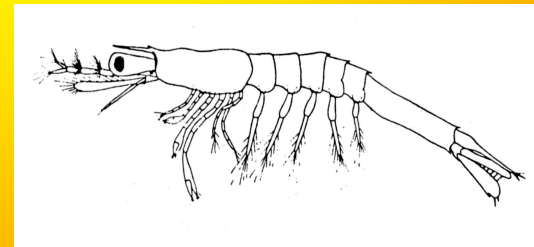
Nauplius
Kisak;



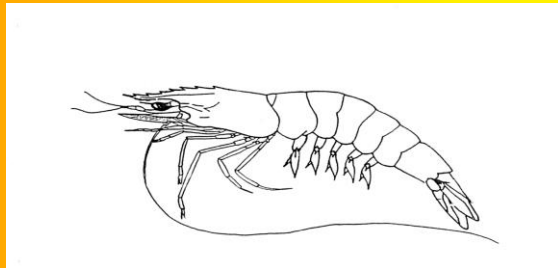
Protozoa
Glnhrhah



Mysis
Flkpp

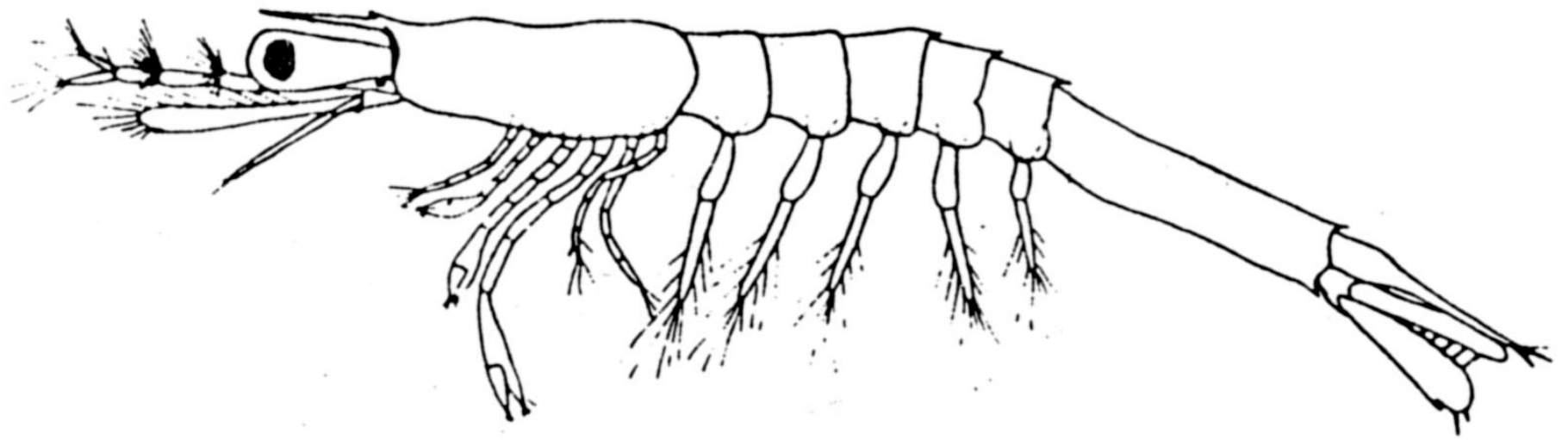


Post Larvae
gajp Flkpp



Adult
tshp, why;





Bad Fry:
Shrunken, grainy muscle

Expanded red chromatophores

Good Fry:
Full, clear muscle, clean shell, good color

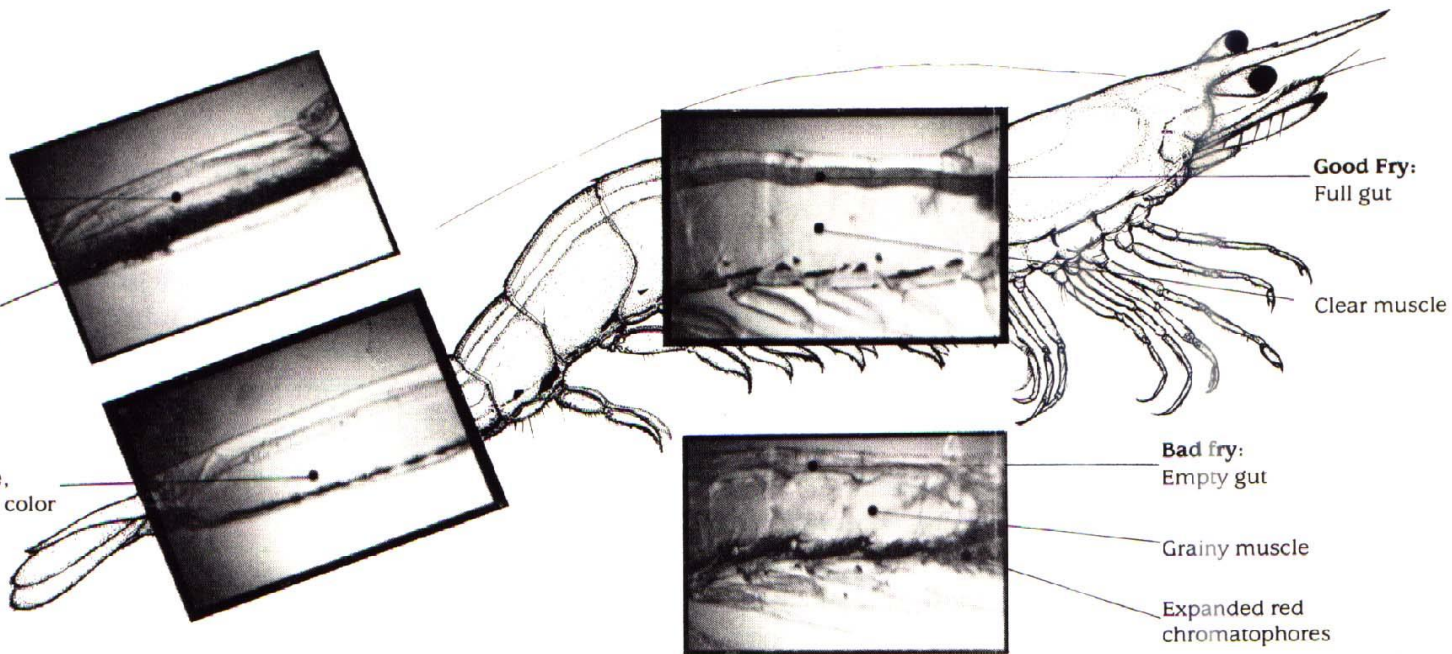
Good Fry:
Full gut

Clear muscle

Bad fry:
Empty gut

Grainy muscle

Expanded red chromatophores



Centrifugal Force Test









































Water Quality

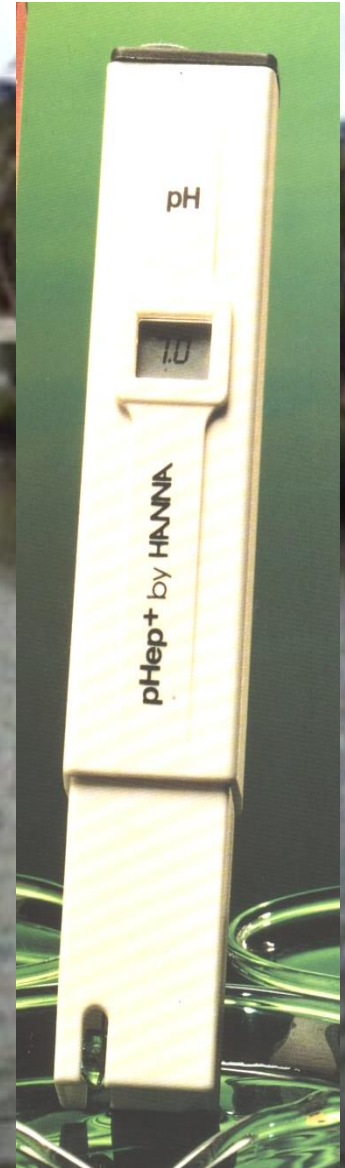
Management & Feeding

Parameters for Prawns Culture

Soil pH	6.5 – 7.0
Salinity) (ppt)	15 – 25
Water pH	8.0 – 8.5
DO-mg/l	> 3.5
NH ₃ (mg/l)	< 0.1
Total NH ₃ (mg/l)	< 1.0
Sulphide (mg/l)	< 0.03

Alkalinity (mg/l)	< 160 - 180
Nitrite - NO ₂ - (mg/l)	< 0.25
Nitrate - NO ₃ - (mg/l)	< 20.0
Phosphate - PO ₄ + (mg/l)	< 3.0
Iron - Fe (mg/l)	< 1.0
Free Chlorine (mg/l)	0.00
Suspended Solid	50.0
Bacterial Counts (TCBS Medium)	
Yellow Colonies(Nos./mg)	< 25.0
Green Colonies	0.00
Algae Type	
Sechi Disk Reading) (cm)	25-35

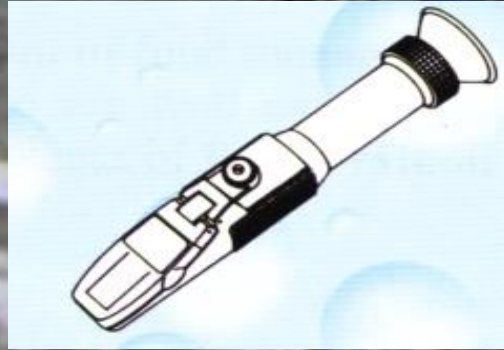
01. *Water pH*



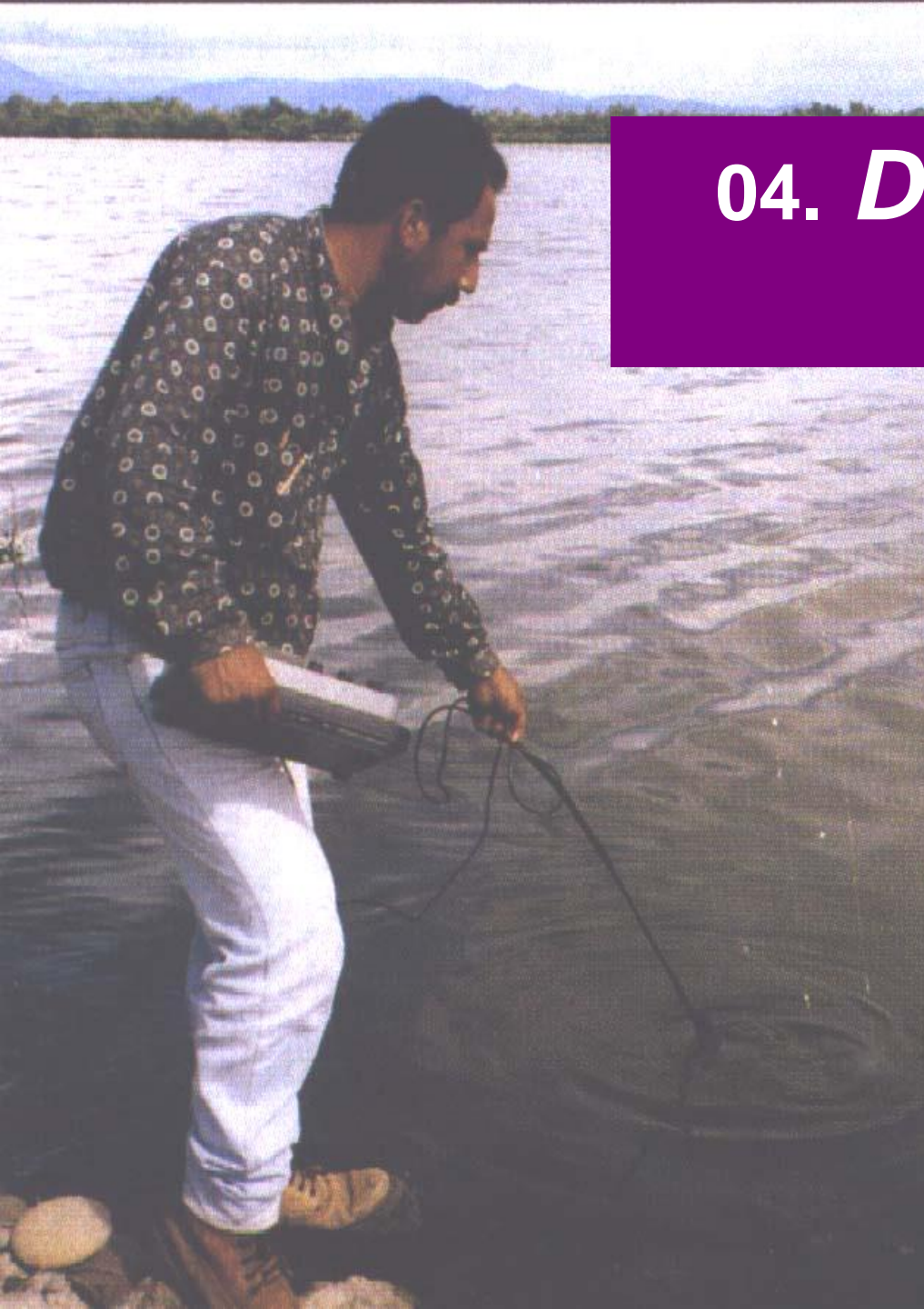
02. *Soil pH*



03. *Salinity*



04. *Dissolve Oxygen* DO



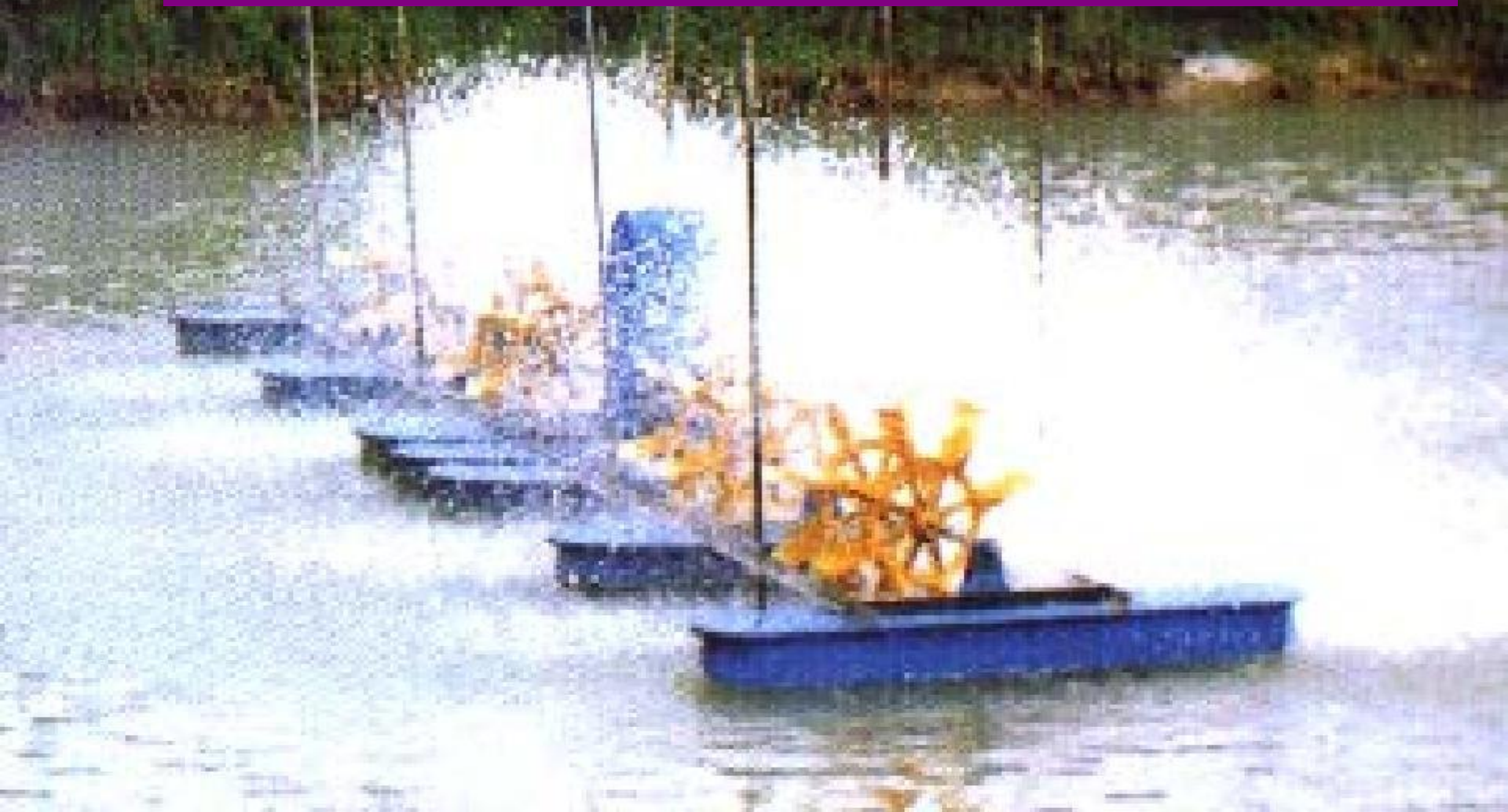
05. Alkalinity



06. *Ammonia*

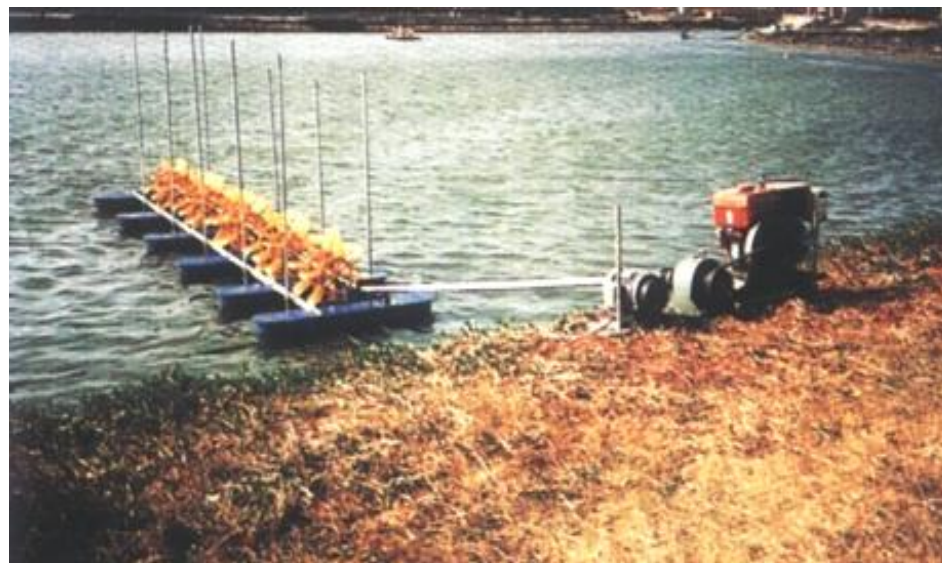


07. *Hydrogen Sulfide*



Aeration in Shrimp Farm

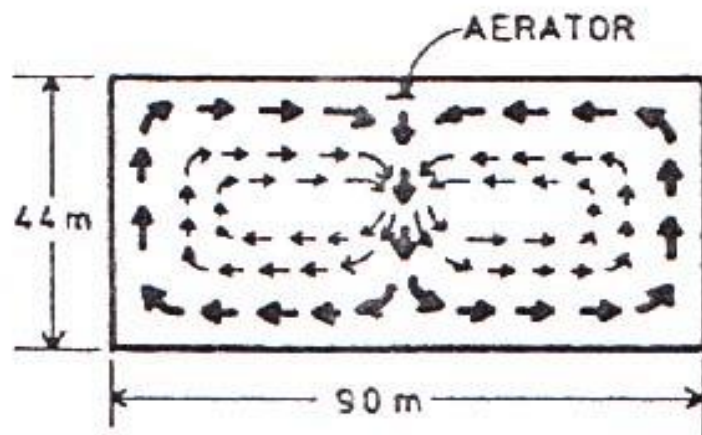
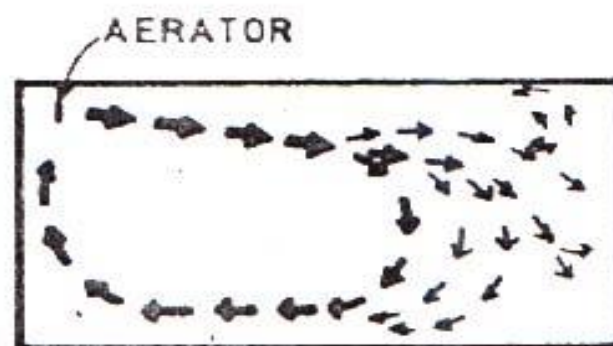
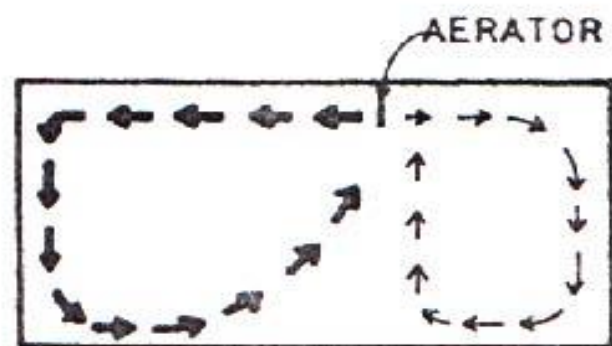
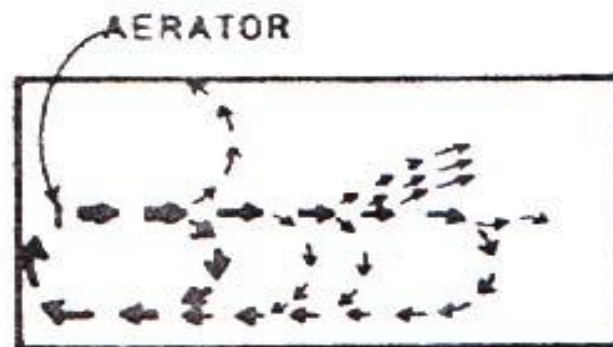
TA-88S (1HP)

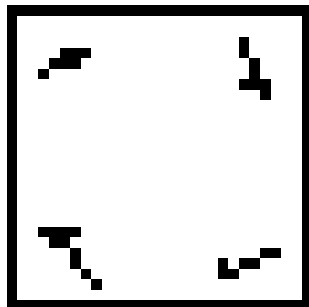
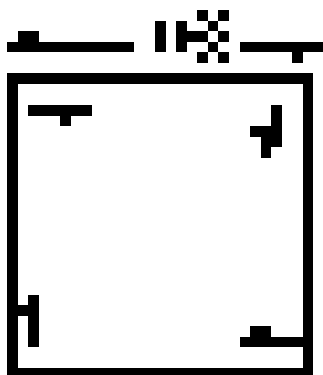


Type of aerator	Average oxygen transfer efficiency (Kg O ₂ /Kw-hr)
Paddle Wheel Aerator	2.13
Propeller - aspirator pump	1.58
Vertical pump	1.28
Pump sprayers	1.28
Diffused air system	0.97

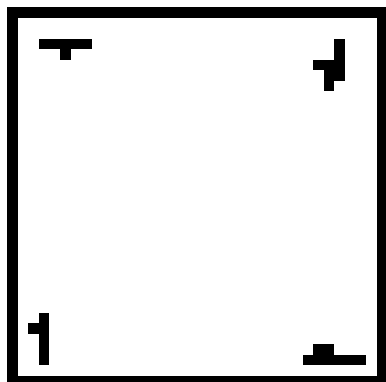
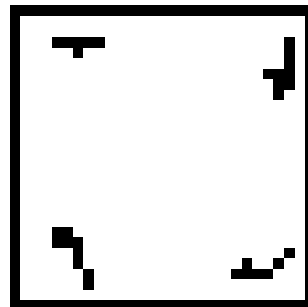
Fixing the Paddle Wheels



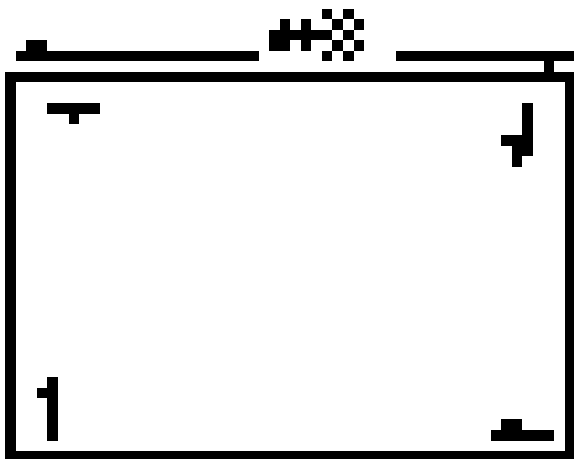
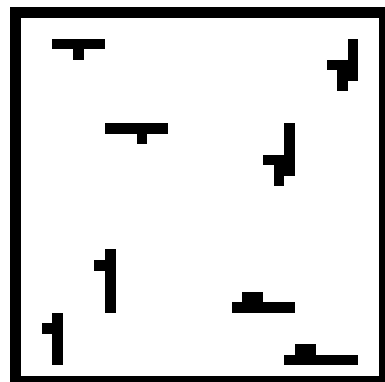




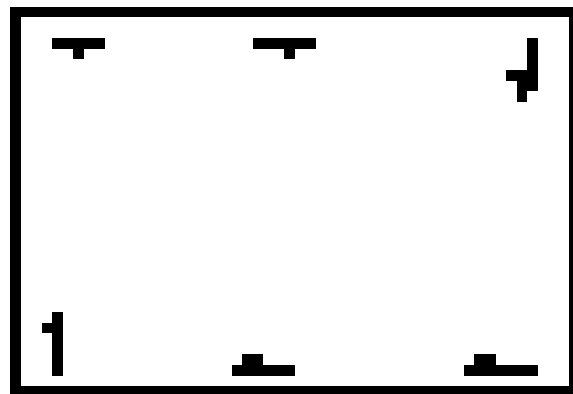
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3



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Feeding



GOLD SUPREME 964

STARTER II PELLETS

25 KG
NET WEIGHT



GOLD SUPREME 963

STARTER I CRUMBLES

25 KG
NET WEIGHT



GOLD SUPREME 962

POST LARVA II CRUMBLES

25 KG
NET WEIGHT



GOLD SUPREME 961

POST LARVA I CRUMBLES

10 KG
NET WEIGHT



DIBUAT DI MALAYSIA
GOLD COIN SPECIALTIES SDN. BHD. (2008165-0)
25, Jalan Pelanduk, Kawasan Perindustrian Larkin,
80200 Johor Bahru, Johor, Malaysia
TEL: 607-2381140



GOLD SUPREME 965

GROWER PELLETS

25 KG
NET WEIGHT



DIBUAT DI MALAYSIA
GOLD COIN SPECIALTIES SDN. BHD. (2008165-0)
25, Jalan Pelanduk, Kawasan Perindustrian Larkin,
80200 Johor Bahru, Johor, Malaysia
TEL: 607-2381140

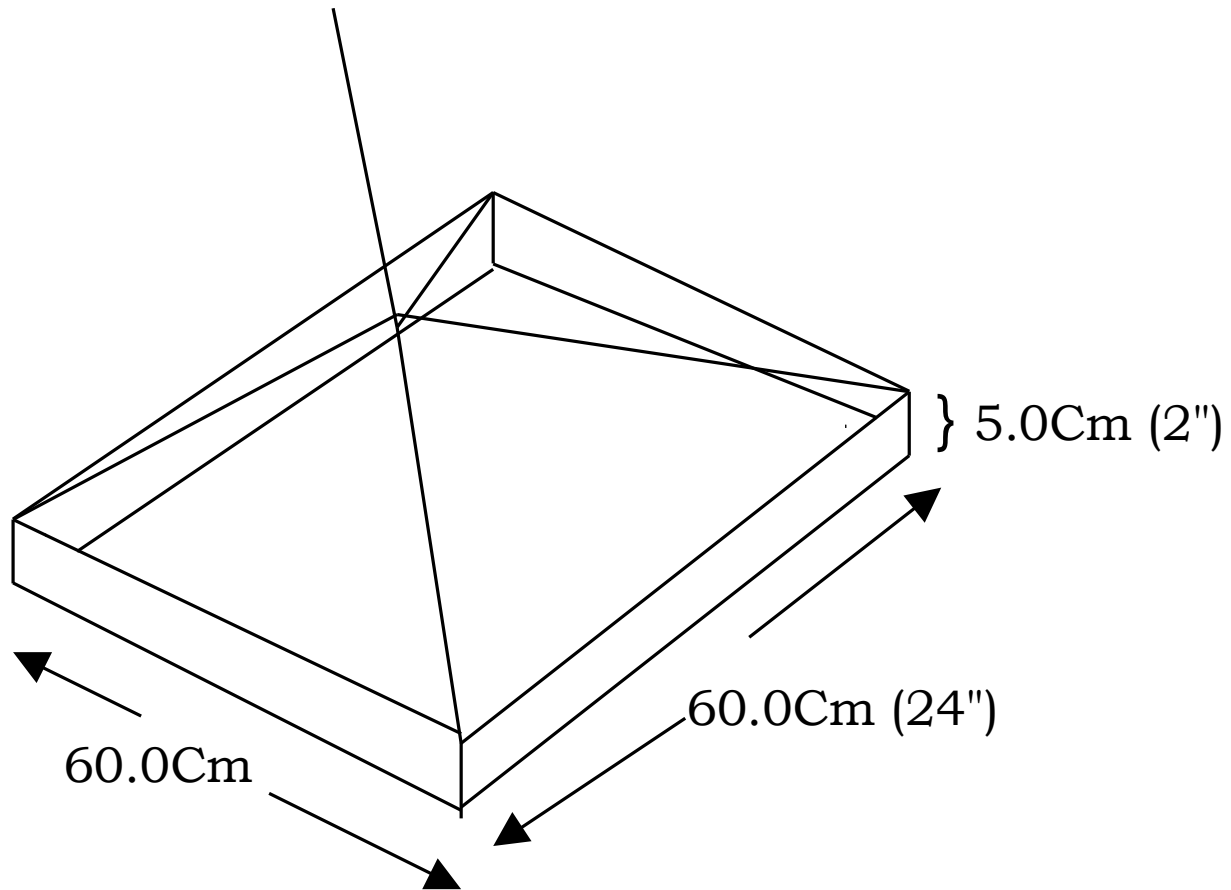


Feed Quantity





Feed Tray







Feeding Times

Feeding time	% of feed per time
07.00 a.m	25% or 20%
12.00 Noon	10%
06.00 p.m	25%
10.00 p.m	25%
02.00 a.m	15% or 20%

A photograph of a pond or lake. In the background, a blue bucket sits on a small wooden float. In the foreground, a wooden pier extends into the water, with a blue net hanging from its edge. The water is calm and reflects the sky. A purple banner with white text is overlaid in the center.

Feeding Methods

Feed Conversion Ratio FCR



Feed Selection









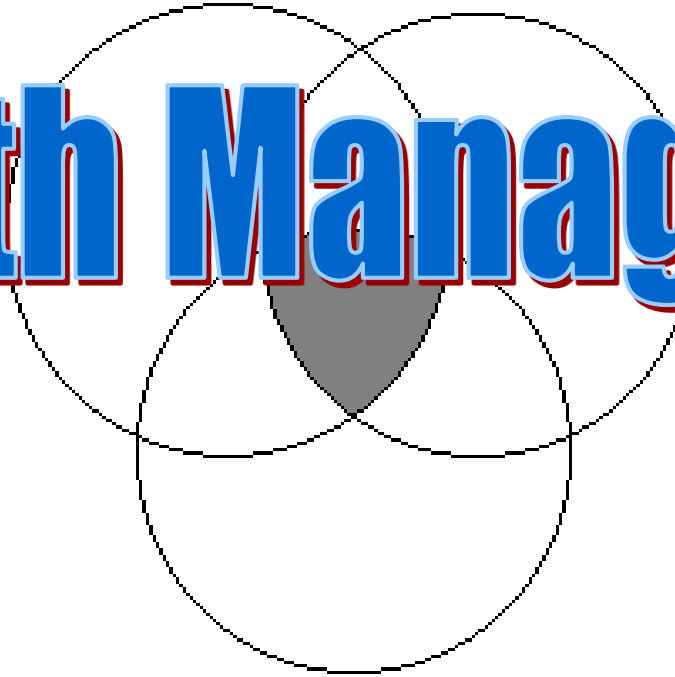






Prawn

Health Management



Protozoan Diseases



•*Shrimp with Cotton Disease*



Cross section of tiger shrimp showing cotton disease.



Shrimp with Zoothamnium fouling

Fungal Diseases



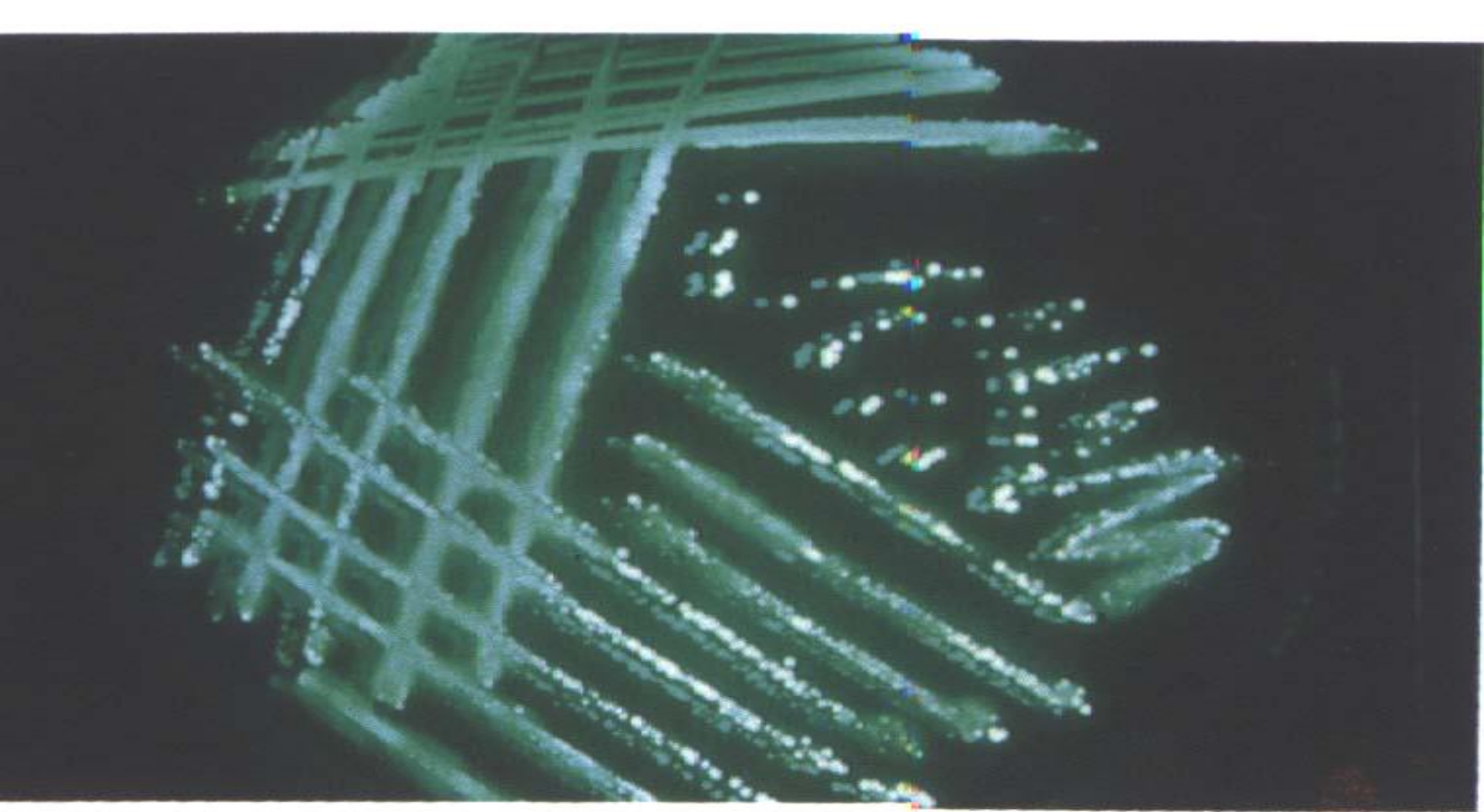
Legenidum



Fusarium Species

Unusually severe external fouling

Bacterial Diseases



**Plate inoculation pattern with
luminescent bacteria**



▪
,
Tail Rot Disease



'Black splinter'



Black gills



Shrimp with Brown Muscle disease



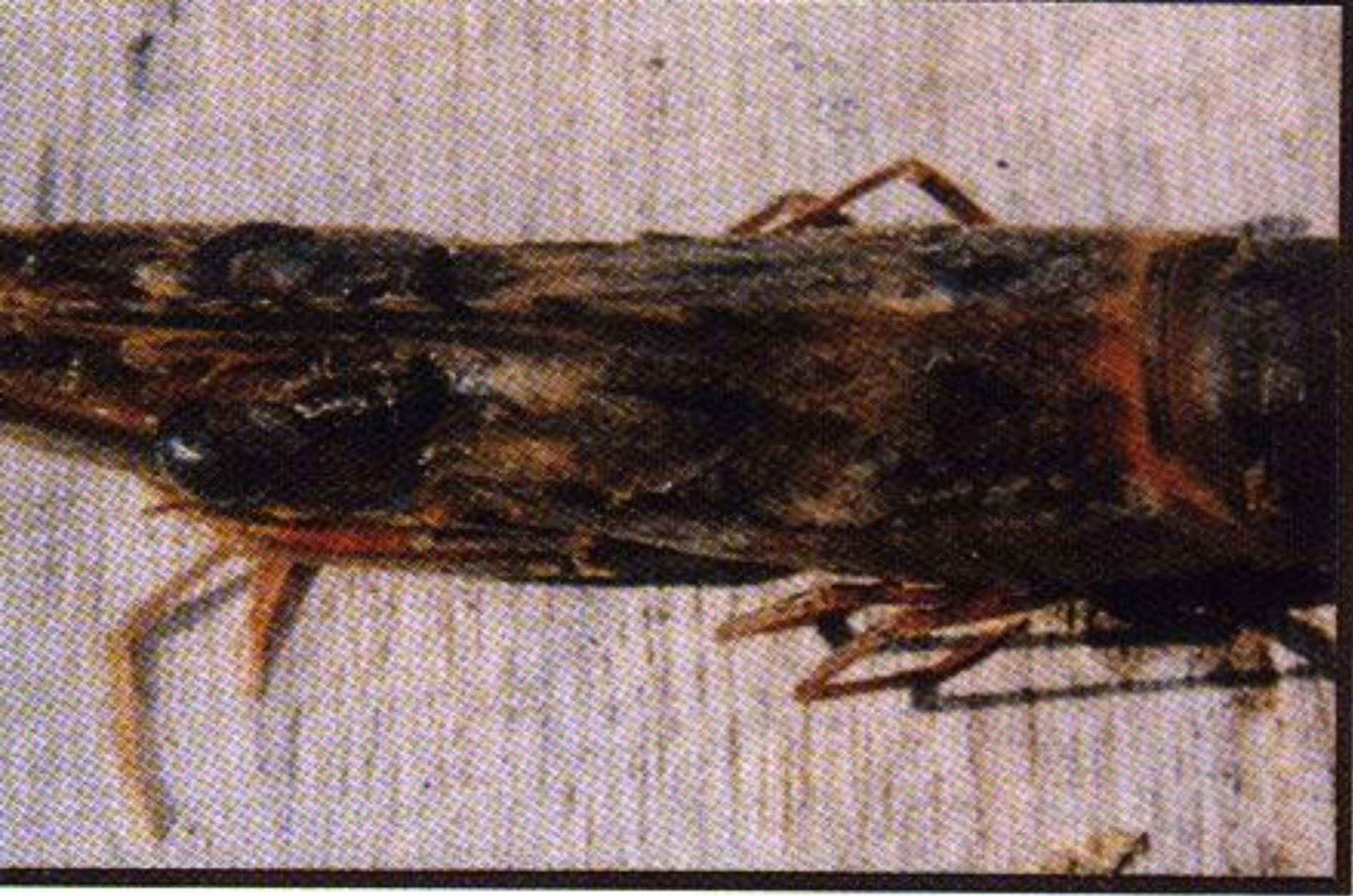
Brown discolouration of the gill



Black discoloration of lesions on the shell



Black discoloration of damaged appendages

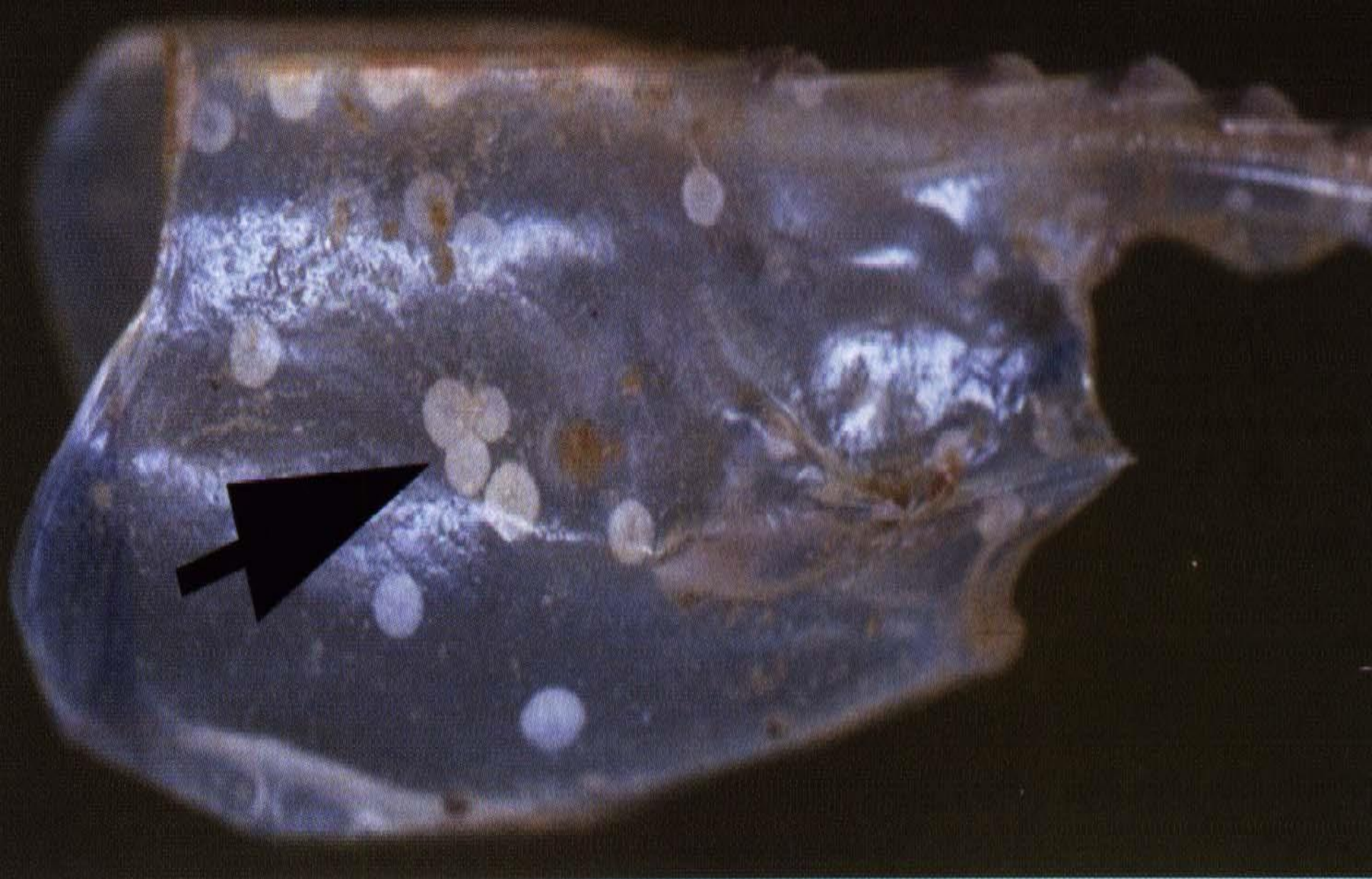


Shrimp With Rust Disease

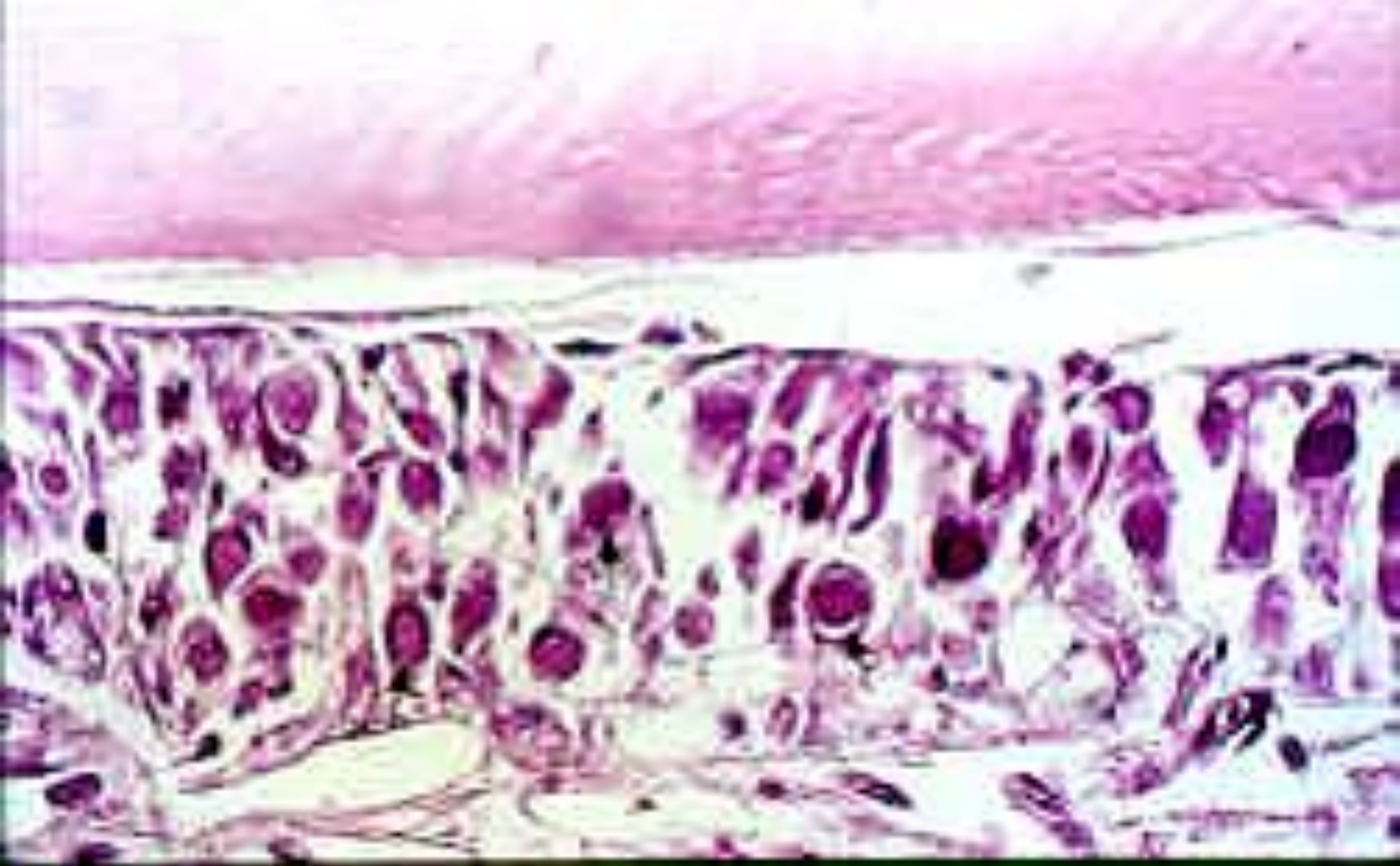
Viral Diseases



White Spot Virus Disease



⋮
;;
White Spot Virus Disease

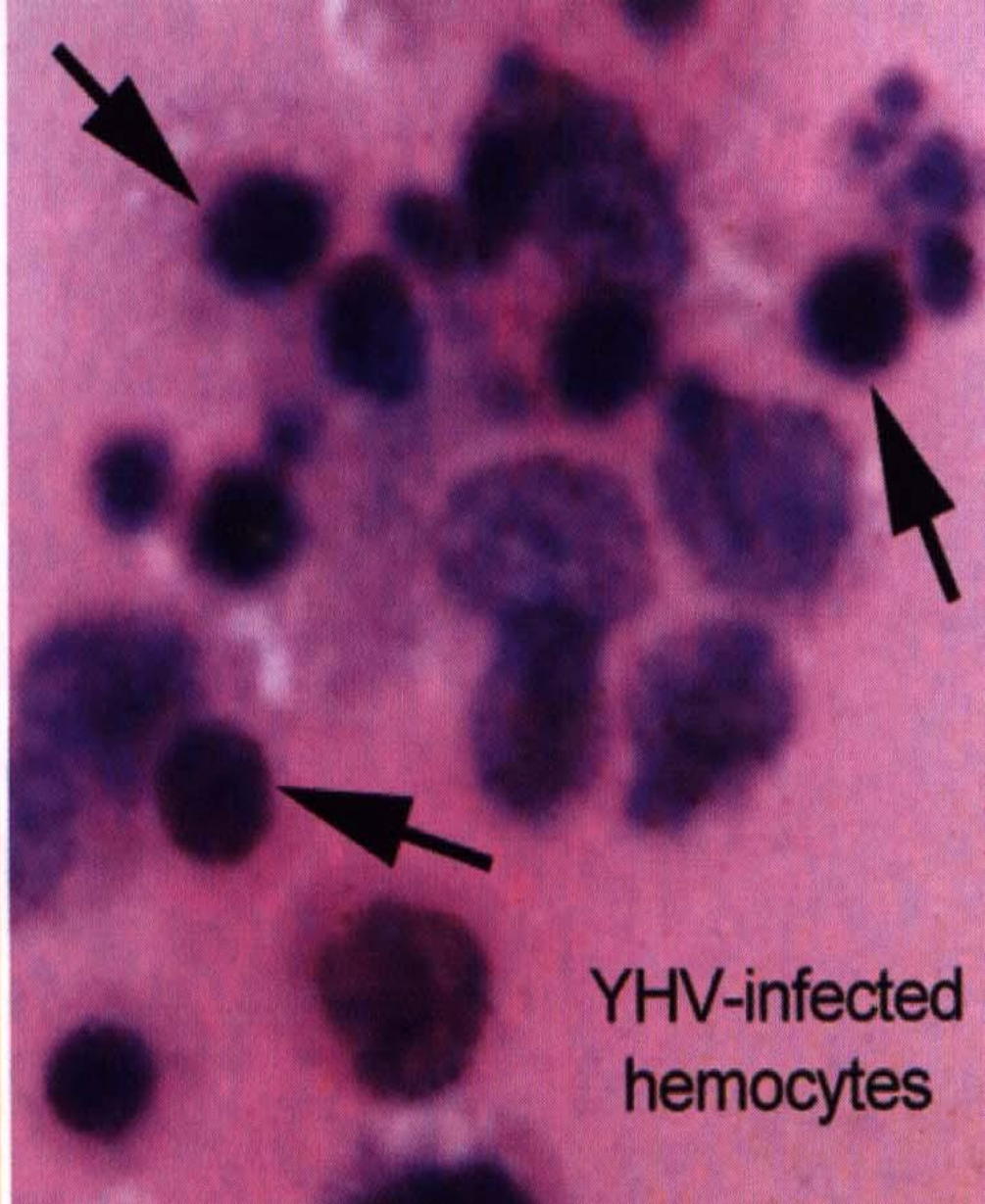
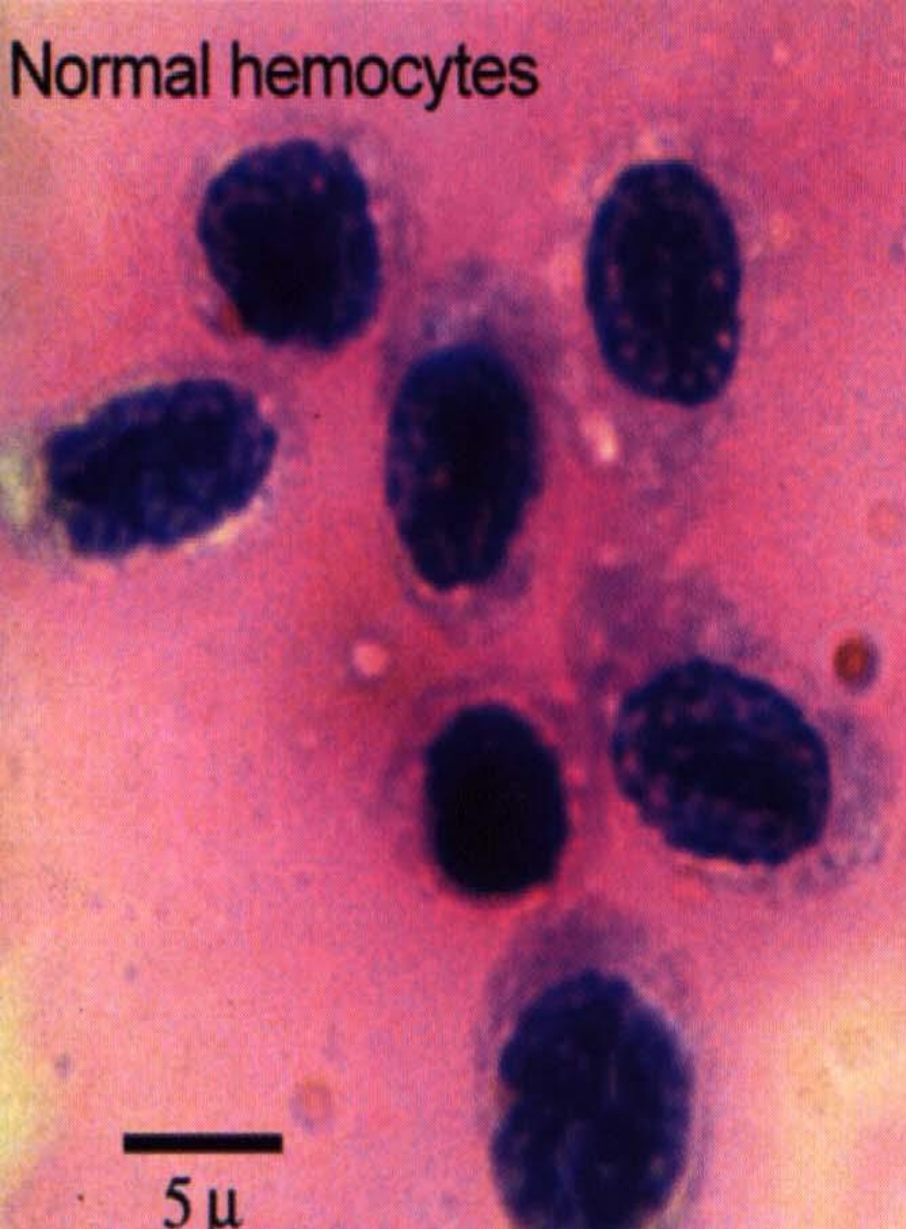


White Spot Disease Virus

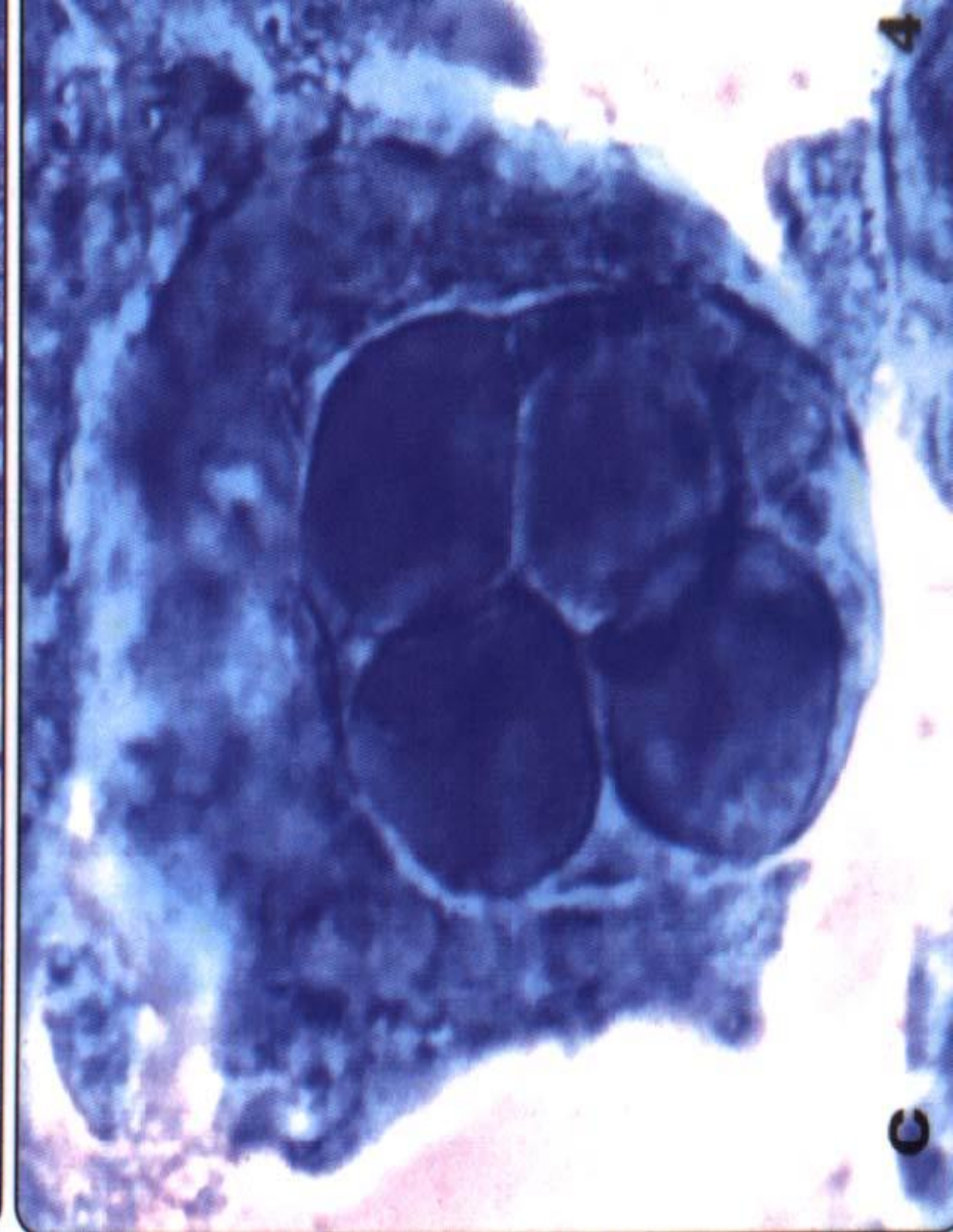
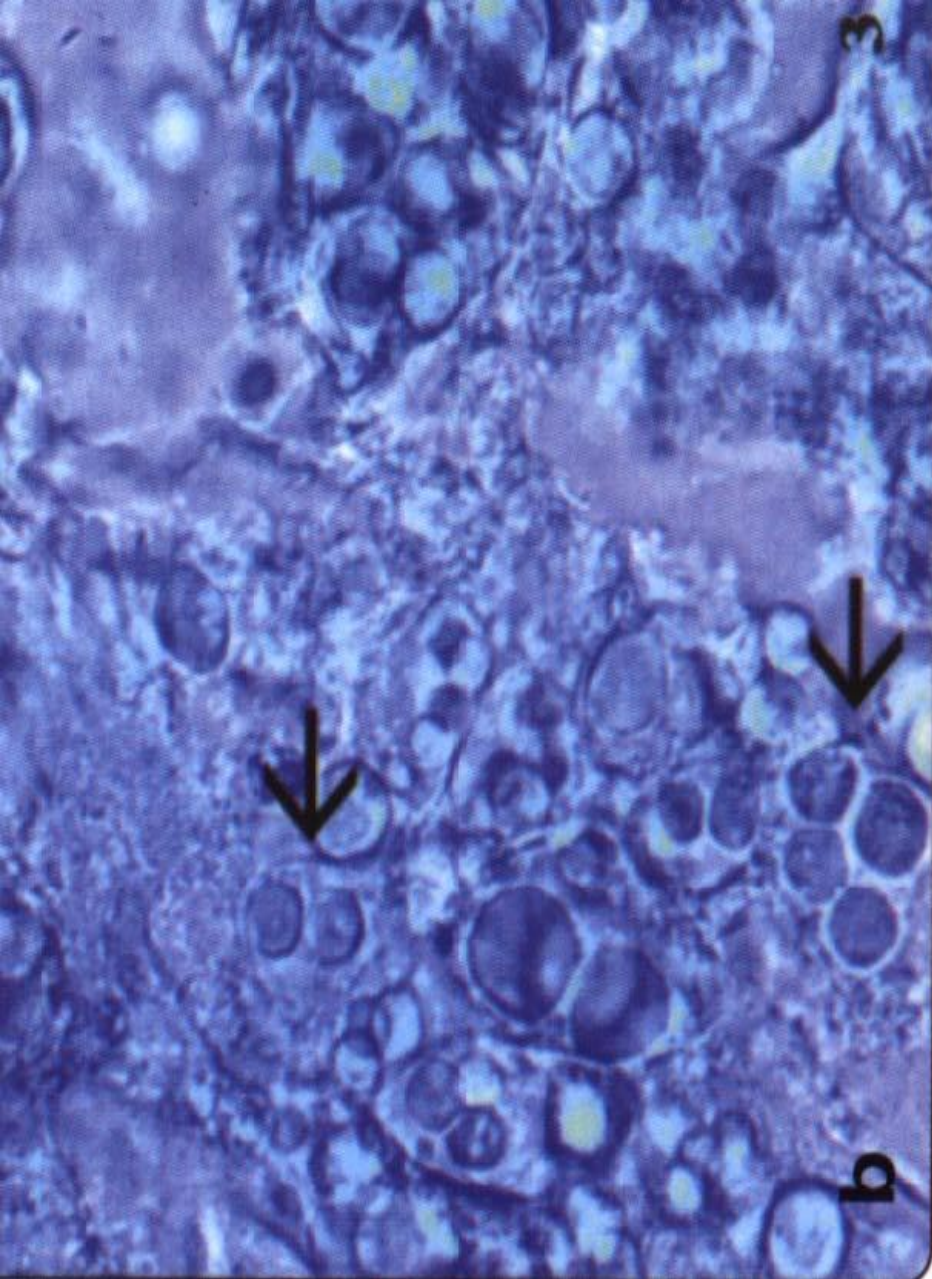


Shrimp with Yellow Head Disease

Normal hemocytes



Yellow Head Disease Virus



MBV Virus

Influence of Environmental Factors



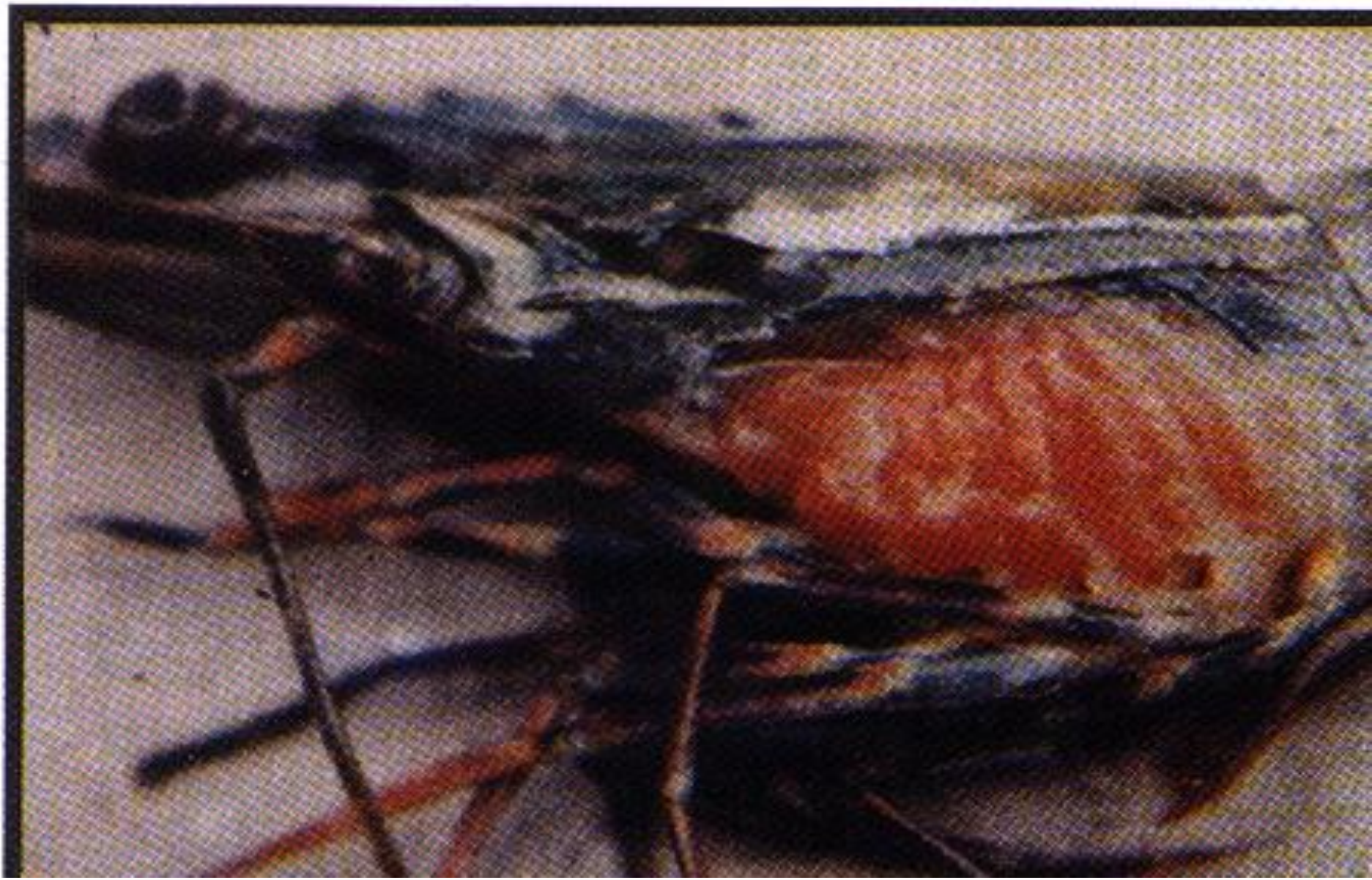
Shrimp with crooked leg & antenna disease



Tail Rot Disease



Black gills



Red discolouration of the gill



Shrimp with Blue Disease



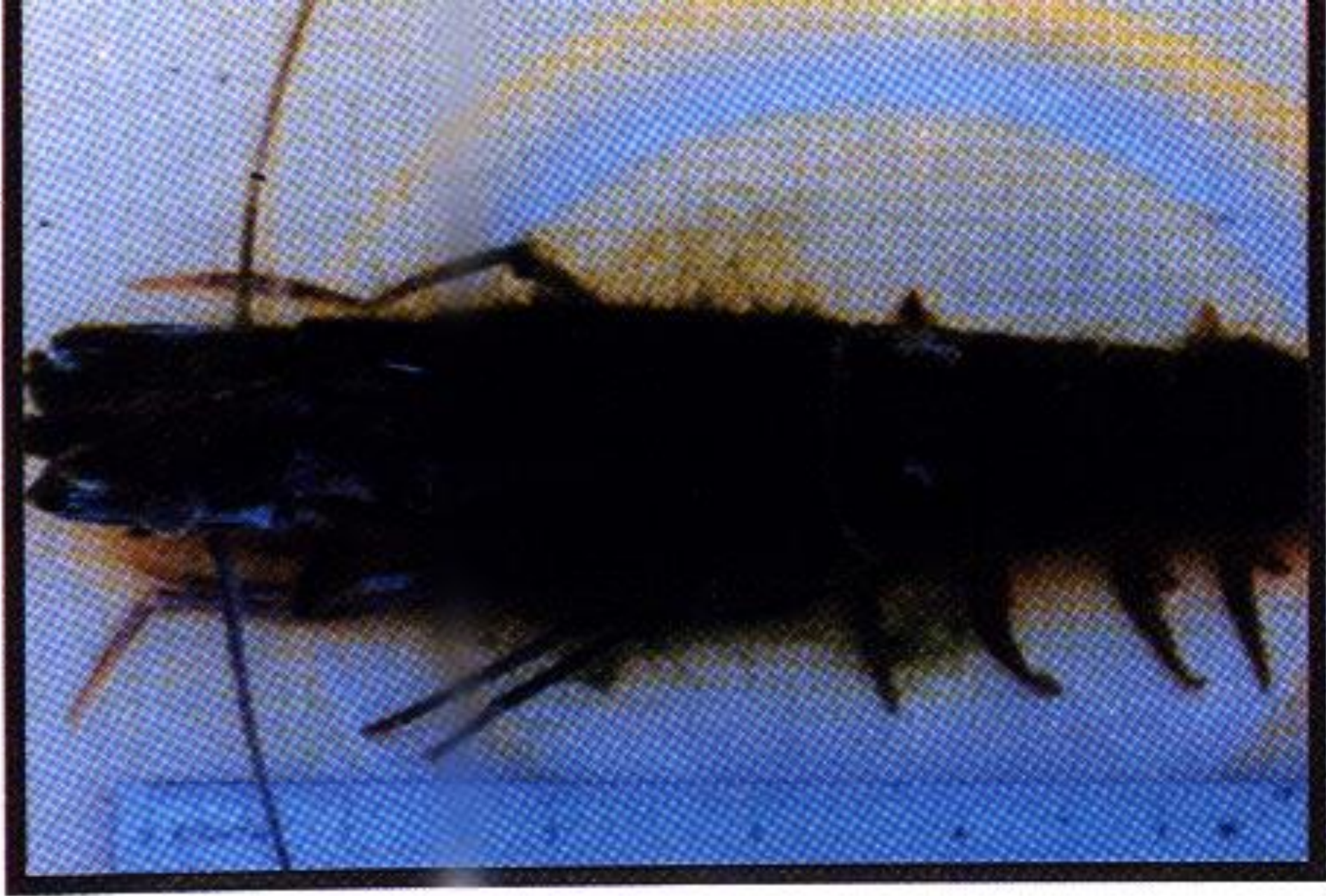
Shrimp with soft shell disease



Shrimp with barnacle fouling



Shrimp with Reddish Appendages



Shrimp with algal fouling



Sick shrimp at the edge of the pond



Dead shrimp at the edge of the dike



Mass mortalities on the pond bottom

Prawn Harvest & Post Harvest Handling



























































SRI
LANKA

PRODUCT OF SRI LANKA

FROZEN

Xcelent®

SHRIMP

NET WT ☐ 2 Kg. ☐ HEAD LESS ☐
☐ 4 Lb. ☐ HEAD ON ☐
☐ 5 Lb.

BRAND

Shrimp



EST A
DISPO
POUR
COMMANDE

la Marche
LANGOUSTES CUIES
199

la Marche
LANGOUSTES CUIES
24

la Marche
LANGOUSTES CUIES
59

la Marche
LANGOUSTES CUIES
59

la Marche
LANGOUSTES CUIES
24







