

**Pond Grow-out Culture of Freshwater Prawn
Macrobrachium rosenbergii with Different Feed Type,
Feeding System and Protein Level**



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Objectives

Determine the effects of

- feed type
- feeding system
- protein level

on freshwater prawn

- survival
- yield
- harvest weight
- feed conversion



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Feed Types

- **Channel Catfish Feed**
 - pelletized
 - sinking
 - 32% protein
- **Shrimp Feed**
 - extruded
 - sinking
 - 35% and 40% protein



Pond Preparation



- Drained ponds in Oct. 1999
- Checked soil pH and applied lime in Feb. 2000 at 2,400 kg/ha
- Flooded ponds and applied rotenone in May 2000 at 900 ml/pond
- Installed 1/2 HP aeration equipment
- Stocked ponds in June 2000

Pond Stocking



- Transported 0.15-g PL's in live-haul truck, commercial hatchery, 30 minutes away
- Replaced half of tank water with pond water
- 12 batches of 4,500 PL's were transferred to buckets
- PL's were allowed to swim out of the buckets at their own pace

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Pond Management



- Pond aeration running all the time
- Pond DO's and water temperature were checked daily
- Emergency aeration was added to ponds with critical DO level
- Nitrite, salinity and pH were checked bi-weekly

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Pond Harvesting



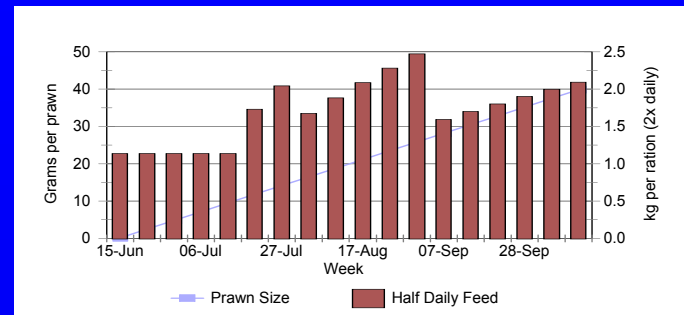
- Drained ponds, screened drain pipes and pumps
- Picked up prawns, harvest sumps
- Prawns were washed, weighed in baskets
- Prawns loaded into totes with crushed ice
- Prawns delivered to processing plant

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Feeding Schedule



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Treatments

TREATMENT	DAYS 1-30	DAYS 31-60	DAYS 61-120
<i>A</i>	CSM	CCF 32	CCF 32
<i>B</i>	CSM	CCF 32	SF 35
<i>C</i>	CSM	CCF 32	SF 40
<i>D</i>	CSM	SF 35	SF 35

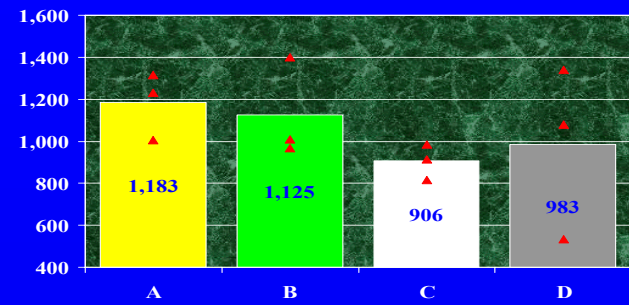
CSM - COTTON SEED MEAL
CCF - CHANNEL CATFISH FEED, SINKING, PELLET
SF - SHRIMP FEED, SINKING, EXTRUDED

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Prawn Yield (kg/ha, heads-on)

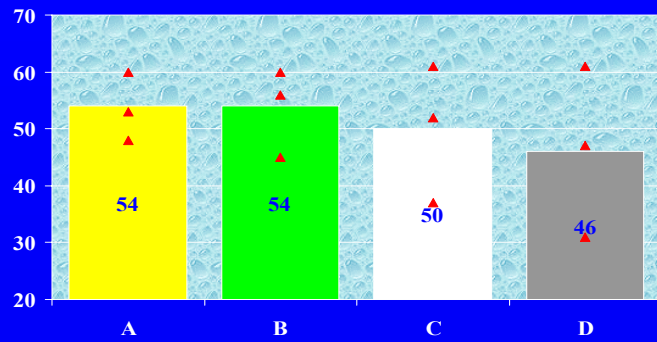


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Percent Survival Rate

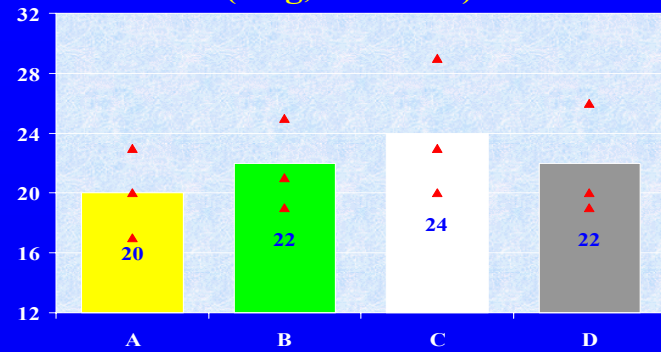


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Prawn Harvest Size (#/kg, heads-on)

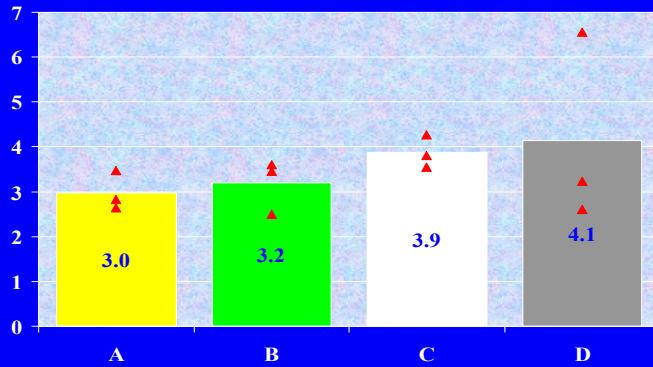


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Feed Conversion



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Implications

- Pelletized versus extruded feed
 - which type is preferred by FWP
- 32, 35, 40 percent protein contents
 - maximize feed conversion
- Feeding schedules
 - when to feed high protein
- Feeding system
 - optimize net returns

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