



ICAR-CIBA - a nodal R&D agency working in brackishwater aquaculture for the past three decades with a vision of environmentally sustainable, economically viable and socially acceptable aquaculture technologies, system interventions, technology backstopping and policy inputs by the institute, contributing to economic benefits of the sector which has already recorded annual export revenue of  $\ref{thmodel}$  20,000 crores apart from domestic consumption.

# WSSV NESTED PCR KIT 2.0 ICAR-CIBA

White spot disease is a devastating viral disease in shrimp and causes 100% mortality in a short span. This disease has caused huge economic loss to the tune of USD 1.0 billion annually since 1994 across the shrimp farming nations of the world. There is no cure for this disease. Prevention through early detection and strict biosecurity is the only measure so far. CIBA has developed early detection kit and method using PCR based molecular techniques.

# Features of CIBA WSSV Kit

- Indigenously developed
- · Cost effective, sensitive and user friendly
- · Detects as low as 10 virus numbers
- · Results could be obtained in 5-6 h
- CIBA keeps improving the kit







Commercialization

• Bangalore Genei Pvt Ltd, Rs.1,10,000 with 10 % royalty

WSSV kit Technology transferred/Commercialized:

· Aura Biotechnologies Private Limited, Chennai

Improved kit is ready for commercialization

Impacts of WSSV kit on Indian shrimp farming

### WSSV Nested PCR Kit 2.0

- The kit has been developed based on nucleocapsid protein gene VP289 of WSSV
- · Internal control in the form of decapod ß -actin gene has been incorporated to eliminate false negative reactions
- Package size 50 reaction and 100 reactions



#### Services Offered

- Detailed project report including sourcing of equipment, chemicals and reagents
- Training of technical personnel
- Transfer of technology on non-exclusive basis

### **Sources**

- COST EFFECTIVE DETECTION KIT FOR SHRIMP DISEASE LAUNCHED: http://pib.nic.in/archive/releases98/lyr2002/rmar2002/21032002/r2103200230.html
- Improved nested PCR for White Spot Syndrome Virus; http://www.ciba.res.in/stuff/WSSV%20kit EOI.pdf

## **Technology Transfer**

• M/s. Bangalore Genei Pvt. Ltd, Bangalore

"Brackishwater aquaculture for food, employment and prosperity"

ICAR-Central Institute of Brackishwater Aquaculture

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