



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, contributing to economic benefits of the sector which has already recorded annual export revenue of ₹ 20,000 crores, apart from domestic consumption.

# WATER QUALITY KITS

## ICAR-CIBA

Maintenance of water quality parameters in optimum level is critical for successful aquaculture operations. It is essential to monitor pH, dissolved oxygen (DO) and the toxic metabolites like ammonia and nitrite which are critical for the survival of aquatic animals. During the culture, knowing the concentration of essential minerals like calcium and magnesium in pond waters helps in avoiding unnecessary application of minerals and reducing the cost of production. Different kits have been developed for detection of these parameters in aquaculture ponds and related aquatic environment. Regular monitoring of these parameters in hatcheries and grow-out farms will help in taking up immediate measures for preventing the economic loss.



## The Technology

### pH & DO Kit

- Kit for the analysis of pH and Dissolved Oxygen.
- Range of measurement: pH 2 to 9.

### AmNi Kit

- Kit for the analysis of ammonia and nitrite in water samples.
- Range of detection - 0.1 to 5 ppm (mg/litre).

### CMH Kit

- Kit for the analysis of calcium, magnesium and total hardness in pond waters of varying salinity 0 to 40 ppt (gm/litre).

### CBA Kit

- For the analysis of carbonate, bicarbonate and total alkalinity in different source and pond waters.



## Technology Benefits

- Higher accuracy and sensitivity.
- Less requirement of water sample.
- Increased shelf life of the reagents.
- Cost effectiveness.
- Wider range of detection and can be used in freshwater, brackishwater and coastal waters.
- Useful for regular monitoring of water parameters in hatcheries and grow-out cultures.
- User-friendly and can be used in the laboratories and field.



## Services Offered

- Detailed Project Report including sourcing of equipment, chemicals and reagents.
- Training of technical personnel.
- Transfer of technology on non-exclusive basis.

## Technology Transfer

M/s. Fisherman's Private Limited, Itarsi, MP.

***“Brackishwater aquaculture for food, employment and prosperity”***

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