

Water quality test kit ready for commercialization



CIBA has developed a cost effective and user friendly kit, named as **CIBA CMH mineral kit** for the estimation of calcium, magnesium and hardness in pond waters that can be easily used at farm site by farm technicians and farmers. The kit is ready for commercialisation on non-exclusive basis. Interested entrepreneurs are requested to send the expression of interest for purchase of the technology for commercial production of the kit.

CIBA Calcium, magnesium and hardness (CIBA CMH mineral kit)

Mineral supplementation in shrimp culture ponds especially in *L. vannamei* is advocated by consultants to compensate limiting mineral ions and improve growth and production. In true sense most of the minerals are not limiting in the pond waters of varying salinity as proven by scientific studies. Unaware of the ions composition and quantities, especially available calcium and magnesium content in the pond waters, shrimp farmers are applying minerals and are need to be aware to reduce the cost of production. Of late due to the awareness created among the farmers, many are interested to estimate these ions in the pond waters during culture period. For this purpose, the kit CIBA CMH mineral kit developed by CIBA will be very useful.

Salient features of the kit:

- Calcium and magnesium effectively be estimated in pond waters for varying salinity of 1 to 40 ppt.
- Sensitive and accurate (± 5 % error compared to laboratory analysis).
- Minimal volume of water sample.

- Minimal chemicals usage for maximum samples analysis.
- Higher shelf life of the reagents.
- Easy to calculate.
- The kit is cost effective in usage also. The reagent used for low salinity range (1-15 ppt) can analyse minimum of 45 to a maximum of 500 samples depending on the salinity.
- The reagent used for high salinity range (16-40 ppt) can analyse minimum of 36 to a maximum of 48 samples depending on the salinity.
- Handy and easy to use.

Business prospects:

- This technology is simple and easy to use at commercial production level.
- The approximate cost of production at pilot testing level for the preparation of kit was less than Rs.100 per kit, excluding the cost of bottles and packaging. Similar kits currently in market are sold in the range of Rs.2000 to Rs.2500.
- Highly remunerative Returns over Investment (RoI) depending upon project size and investment is assured, if good marketing strategy is adopted.

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