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Shrimp Pond Case Study

Use of StartSmart for Reducing Mortality and Improving Yield in Shrimp Farms.
Species Being Treated: Tiger Prawn (P. monodon),

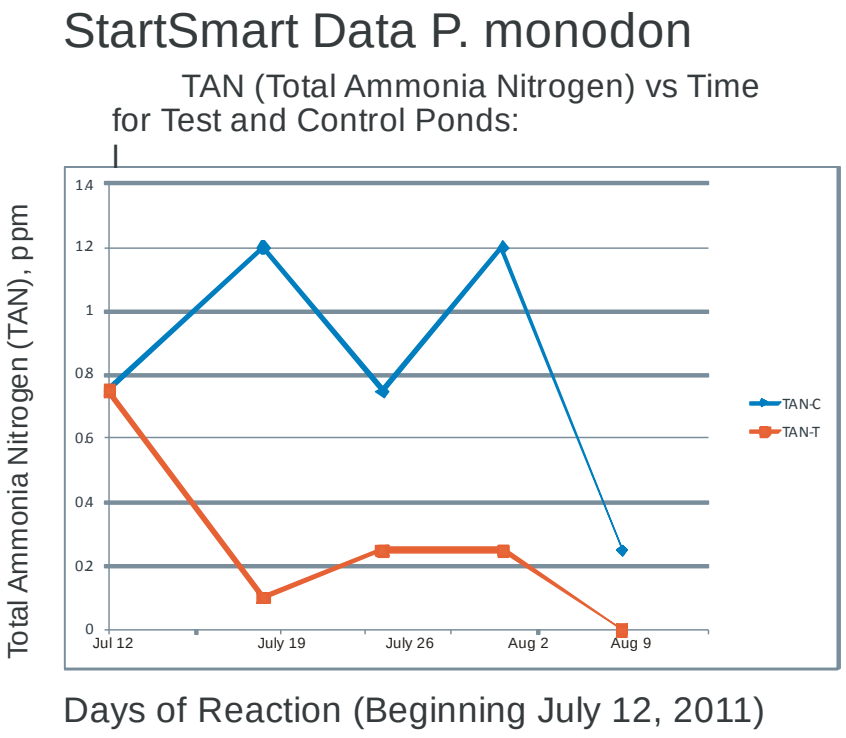
Experiment conducted by Huantec (Taiwan), under the direction of Robin Tsai. Characteristics of hatchery / larval growth tanks:

- 1.2 meters length
- 4 meters wide
- 0.6 meters depth

Total volume: 3 cubic meters (rounded up). This is about 750 gallons total volume.

Test and Control Tanks:

Huantec set up 4 test tanks and 4 control tanks. Each tank was stocked with 800,000 PL (post larval). All tanks were set up at 30 to 34 ppt salinity, and were fed identically with industry standard feed stock. Ammonia in all tanks were tested over a several week period, from initial stocking to just prior to transfer. Results were as shown below:



StartSmart was added to the test tanks at 50 ppm per week. With tanks at 750 gallons, that is a dose of 5 ounces of StartSmart per tank per week.

With an initial load of 800,000 baby shrimp in each tank, the ammonia levels are expected to be quite high. The control tanks showed ammonia between 0.8 to 1.2 ppm during most of the growth period.

In contrast, the average ammonia concentration in the StartSmart treated tanks was 0.2 and 0 ppm during this study.

The dramatic improvement in ammonia reduction in the treated tanks resulted in a dramatic improvement in survival:

Starting crop: 800,000 baby shrimp.

Control Tank Average Survival:

33% mortality rate, 530,000 grow to 1.5 cm. 260,000 die and are lost.

StartSmart Tank Average Survival:

8% mortality rate, 736,000 grow to 1.5 cm. 64,000 die and are lost.

StartSmart treatment reduced mortality by about 75%.