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AQUA-Cal+™

Solutions for the prawn & shrimp aquaculture industry

PRODUCT BROCHURE \ SEPT 2018

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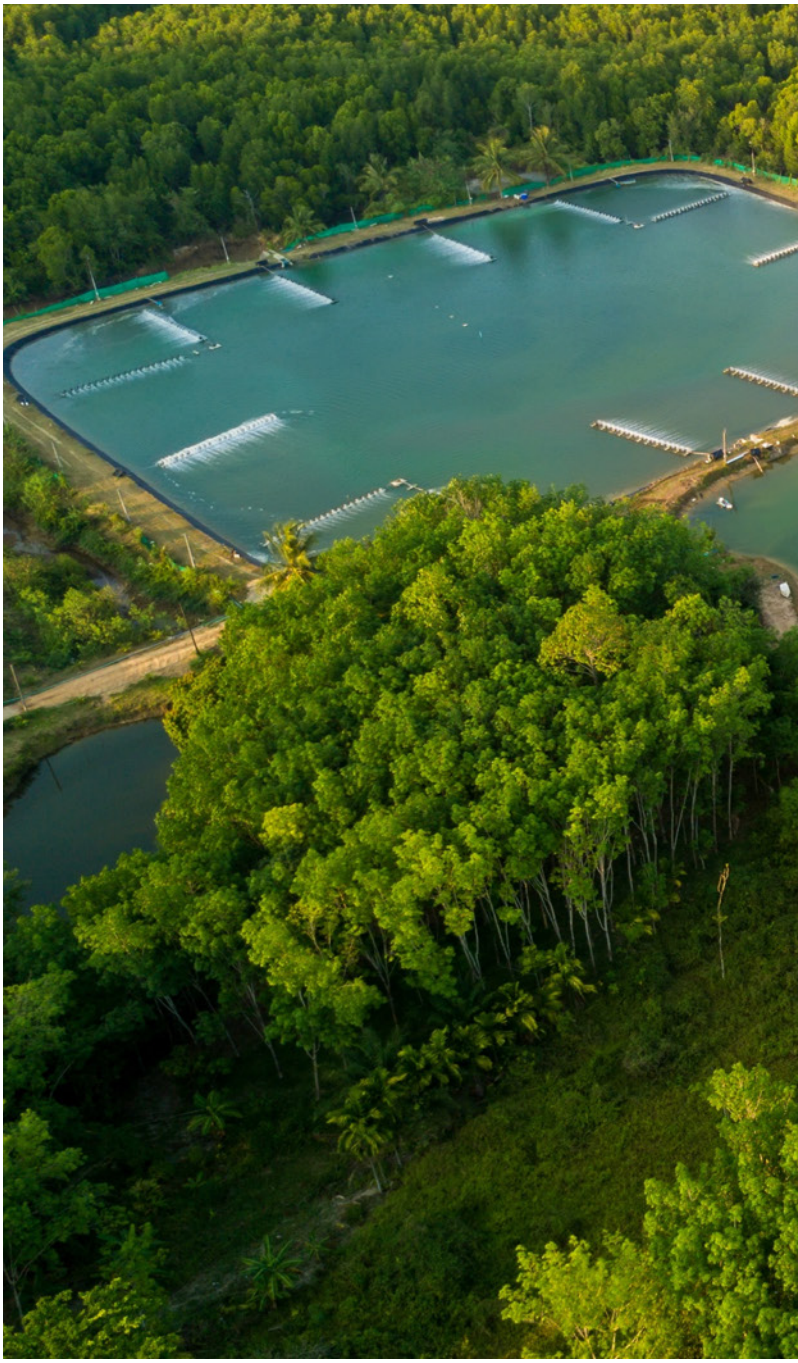
AQUA-Cal+™



AQUA-Cal+ is non-toxic, non-corrosive, safe, environmentally friendly and meets many core needs in aquaculture.

AQUA-Cal+ is made by flash calcining a mixture of magnesite and dolomite to produce a unique, very high surface area powder, and then hydrating the powder to produce a slurry for ease of application to ponds. It has been specially formulated to impact on both the aqueous and benthic ecosystems in the pond.

White Leg Shrimp (Vannamei)

Giant Tiger Prawn (Monodon)

Utilizes a current waste and potential toxic bottom sludge, protect environment system.

Increase harvest weight, survival rate, reduce energy cost, FCR...

DOSAGE

AQUA-Cal+ is a liquid slurry, dosing at the paddle wheel on a weekly basis throughout the grow out is required. Dosage is at 60 ppm total for the grow out i.e. in a 1 ha in a 1 ha pond with a depth of 1M that is 600kg or 37.5kg per week over a standard grow out period.

IMPROVED WATER QUALITY

AQUA-Cal+ works as a water and pond bottom conditioner; clarifying the water, controlling pH and releasing alkalinity as required to aid in the digestion of organic matter.

IRON SUPPRESSION

Conditioning with AQUA-Cal+ removes the iron by flocculation from the water, significantly reducing turbidity and toxicity. The stocking of the pond after the water is conditioned reduces the subsequent mortality of the post-larvae.

BETTER PERFORMANCE

Results from trials on both Pacific White Shrimp and Tiger Prawns show that AQUA-Cal+ has a superior performance to probiotics in controlling ammonia, nitrite and pond bottom sludge. The data consistently shows AQUA-Cal+ stabilizes alkalinity, suppresses extreme changes in pH, provides ingestible essential magnesium and calcium, reduces turbidity, improves light penetration, improves phytoplankton productivity; reduces toxic metals in the system (copper, zinc); reduces ammonia and nitrite.

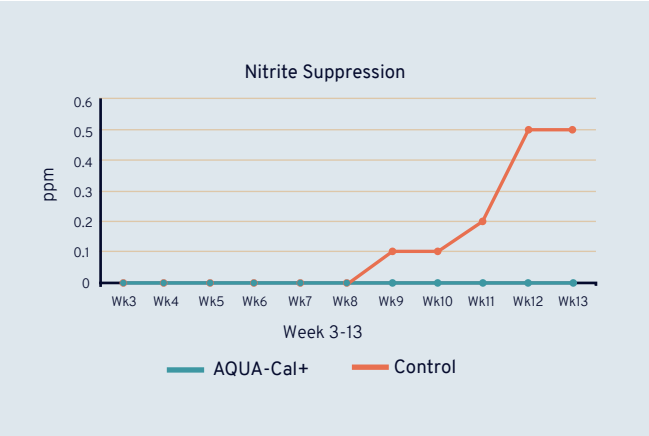
LESS STRESS ON PRAWN AND SHRIMP

With stabilized conditions in the pond, stress is reduced. When stress is reduced and water conditions are improved, both fish and prawns become healthier and more productive.

Case Study: Trials on Pacific White Shrimp and Tiger Prawns

Results from both Pacific White Shrimp and Tiger Prawns show that AQUA-Cal+ has a superior performance and economic benefit to the farmer compared to probiotics.

In 2016, we undertook a testing program with major prawn farmers in Malaysia to test the benefits of AQUA-Cal+ on microbial and water quality, as well as to test the safety of the product on shrimp post-larvae.



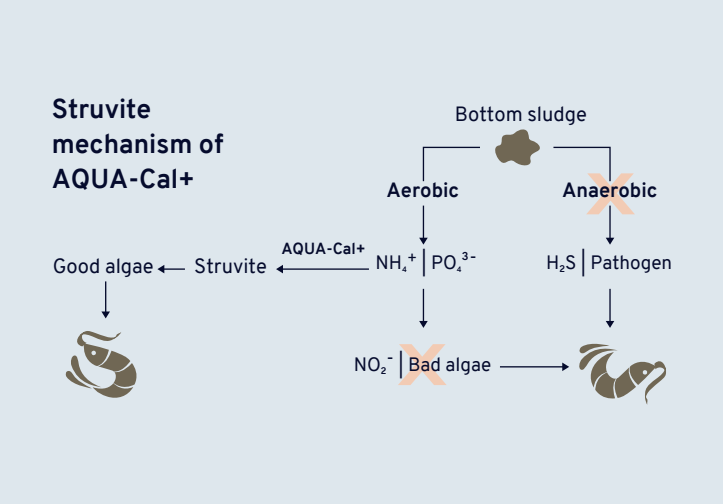
Observation 1 - Prawn mortality reduced

Conditioning with AQUA-Cal+ removed the iron by flocculation from the water, the turbidity and toxicity were significantly reduced, thus decreasing the subsequent mortality of the prawns.

No iron presence after pre-treatment with AQUA-Cal+

Observation 2 - Significant reduction in sludge volume

As AQUA-Cal+ neutralised the pond bottom sludge and accelerated its breakdown, a suppression of the pond bottom septicity was observed. AQUA-Cal+ also allowed a more rapid break-down of the sludge, which helped releasing organic material for the growth of phytoplankton (natural food for shrimp), while binding the toxic contaminants. Subsequently, the smell of the sludge was greatly reduced, with less toxic compounds in water.



Observation 3 - Water quality improved

Because AQUA-Cal+ stabilizes alkalinity, suppresses extreme changes in pH and provides ingestible essential magnesium and calcium, phytoplankton productivity was improved and toxic metals in the system (such as copper and zinc) along with ammonia and nitrite levels were significantly reduced.

AQUA-Cal+ = Higher Revenue

Trial results: Monodon, earthen ponds

Pond	Shrimp /kg*	Survival Rate (%)	Harvest Weight (kg)	Total Revenue (RM '000)
Control	46	88	4,732	135
AQUA-Cal+	33	91	6,672	234

*Market Shrimp Price/kg
46 shrimps - RM28.50; 33 shrimps - RM35.00
(1RM (Ringgit) = AUS$0.3)

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Operations Locations

1 - London - R&D Office
2 - Lixhe, Belgium (Leilac Project)
3 - Paris - R&D Office
4 - Philippines (MHL Facility)
5 - Gold Coast, Qld - MHL Facility
6 - Sydney Head Office
7 - Bacchus Marsh, Vic (CFC Plant & R&D Facility)
8 - Myrtle Springs, SA (Magnesite Mine)

Distribution Partners

9 - Perth
10 - Mount Isa
11 - Brisbane
12 - Tamworth
13 - New Zealand
14 - Malaysia
15 - Hong Kong
16 - Nevada
17 - Southern California
18 - Hawaii

A Global Company

From our base in Australia, we've reached out across the globe. We are now present on four continents and distribute our solutions in many countries.

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Distribution Partners

Calix has established a network of local distributors and partners who can deliver our solutions across the globe, to ensure you receive excellent customer service and support, wherever you are located.

100% Recycled Paper

Calix is committed to sustainable practices that contribute to saving the planet. This means we try to reduce printing where possible or make sure that when we do print it is on 100% recycled paper. We appreciate your support in this important initiative.