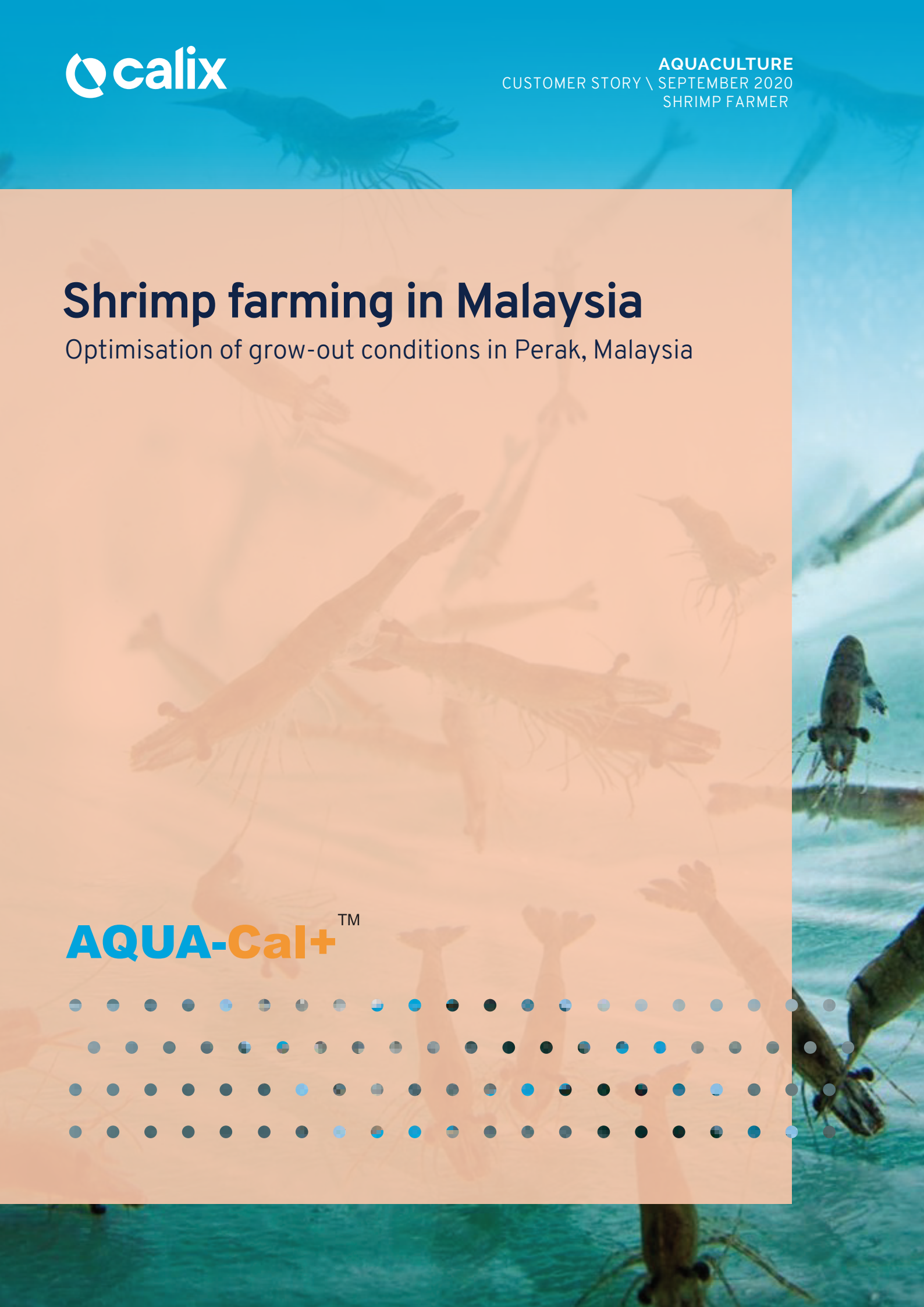
calix

AQUACULTURE
CUSTOMER STORY \ SEPTEMBER 2020
SHRIMP FARMER

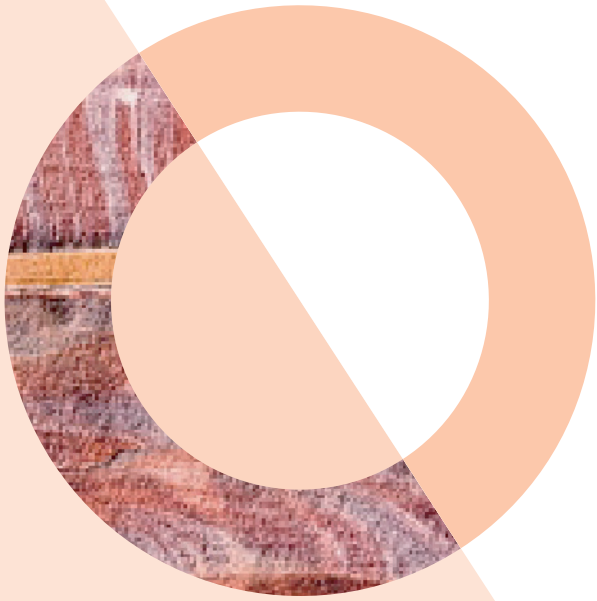
Shrimp farming in Malaysia

Optimisation of grow-out conditions in Perak, Malaysia

AQUA-Cal+™



The case study snapshot



Background

A small shrimp farm in Parak Malaysia was struggling with decreased harvest weights, frequent sludge drainage and high iron levels. The shrimp farm has 20 active ponds of earthen construction. The ponds are, on average, half a hectare in size and one meter deep, and are typically stocked with 100 to 120 shrimp every one square meter. They typically take around 12 weeks to grow to a size ready for harvest.

OBJECTIVES

- Improve water quality
- Improve pond bottom quality
- Increase harvest returns
- Reduce use of probiotics and algaecides
- Reduce sludge drainage

CHALLENGES

- High iron content in the pond
- Frequent sludge drainage
- Decreasing harvest weights

SOLUTION

A special formulation of AQUA-Cal+ was applied in this pond.

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

An initial AQUA-Cal+ dosage of 20 ppm successfully dropped the soluble iron in the pond and prepared the pond for post larvae (PL) introduction.

No probiotics or algaecides were used.

After one week, PL was introduced and after two weeks, the weekly dosage of AQUA-Cal+ was adjusted to 4ppm.

BENEFITS

- Pond bottom condition improved
- Iron problem reduced significantly
- Reduction of ammonia, nitrite, and phosphate
- Survival rate of shrimp increased
- Shell of the shrimp hardened, and weight increased

CONCLUSION

The addition of AQUA-Cal+ at 20 ppm pre-treatment and 4ppm thereafter significantly increased water and pond bottom quality, controlling ammonia and nitrite as well as bottom sludge volume.

The improvement in the pond environment contributed to its health and subsequently to the shrimp size and harvest quantity.