

QUARTERLY PROGRESS SUMMARY:

October to December 2015

SPATNZ



Summary of progress during this quarter

The two batches of mussel larvae produced in the last quarter of 2015 were our best yet, and reached the target scale for our pilot facility for the first time.

The second of these batches established two strains of mussel, selected from the breeding programme, as good all-round performers, to be benchmarked against farmed mussels sourced from wild spat. A third selected strain will be added in early 2016. The selected and control groups will be grown through to harvest on a wide range of sites using normal commercial farming methods and mussel performance compared during growout, harvest and processing.

Arguably the key mussel food in our hatchery is the microalga *Chaetoceros calcitrans*. This species traditionally fails to thrive in the more efficient continuous flow bag system and requires laborious batch culture to keep it healthy and avoid harming mussel larvae. So far, our attempts to grow *Chaetoceros calcitrans* in continuous culture have been highly successful, and the algae has produced good larval results.

Key highlights and achievements

- Produced our two largest batches of mussel spat to date, and hit target scale for the pilot hatchery for the first time
- Established two good all-round mussel strains in the hatchery to benchmark against mussels reared from wild spat
- A key microalgal food species, *Chaetoceros calcitrans*, has been growing well in continuous culture, and producing good larval performance

Upcoming

- Production of a third selected mussel strain for benchmarking against wild mussel controls
- Further testing of continuous bag cultured *Chaetoceros calcitrans*
- Commence developing on-line teaching resources for aquaculture students
- Commence planning for Stage 2 fitout planned for late 2016

Investment

Investment period	Industry contribution	MPI Contribution	Total investment
During this Quarter	\$0.33 M	\$0.33 M	\$0.66 M
Programme To Date	\$6.45 M	\$6.45 M	\$12.89 M

The key microalgal mussel food, *Chaetoceros calcitrans*, traditionally has to be grown in carboys (top photo) which is very labour intensive. Our initial trials culturing this species in the much more efficient continuous flow bag system (below) have been very successful and have produced good larvae.

